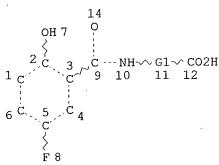
SEARCH REQUEST FORM

| Requestor's Name: | | Serial Number: | | |
|-----------------------|--|----------------------|--|--|
| Date: | Phon | ne: | Art Unit: | |
| terms that may bav | e a special meaning. Give exam | | e subject matter to be searched. Define as keywords, etc., if known. For sequences most relevent claim(s). | |
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| Searcher: <u>Be</u> J | eru € 2528 | STIC | IG | |
| Terminal time: | | CM-1 | STN | |
| | | Pre-S Type of Search | Dialog | |
| | | N.A. Sequence | APS Geninfo | |
| | : | A.A. Sequence | SDC | |
| | es: | Structure | DARC/Questel | |



S

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FILE 'REGISTRY' ENTERED AT 09:01:35 ON 07 JUN 2004
L1
                STR
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REP G1 = (7 - 7) C NODE ATTRIBUTES: DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 13

STEREO ATTRIBUTES: NONE

3 SEA FILE=REGISTRY SSS FUL L1

583 ITERATIONS 100.0% PROCESSED

3 ANSWERS

SEARCH TIME: 00.00.01

(FILE 'CAPLUS' ENTERED AT 09:02:51 ON 07 JUN 2004) 2 S L3

CAPLUS COPYRIGHT 2004 ACS on STN ANSWER 1 OF 2

ACCESSION NUMBER:

2001:549162 CAPLUS

DOCUMENT NUMBER:

136:107380

TITLE:

L4

Oral delivery of biologically active parathyroid

AUTHOR(S):

Leone-Bay, Andrea; Sato, Masahiko; Paton,

Duncan; Hunt, Ann H.; Sarubbi, Donald; Carozza, Monica; Chou, James; McDonough, James; Baughman,

Robert A.

CORPORATE SOURCE:

Emisphere Technologies, Inc., Tarrytown, NY,

10591, USA

SOURCE:

Pharmaceutical Research (2001), 18(7), 964-970

CODEN: PHREEB; ISSN: 0724-8741

PUBLISHER:

Kluwer Academic/Plenum Publishers

Shears

DOCUMENT TYPE:

LANGUAGE:

Journal English

GΙ

571-272-2528

Searcher :

AB Parathyroid hormone (PTH), the only drug known to stimulate bone formation, is a peptide therapeutic indicated in the treatment of osteoporosis. Unfortunately, PTH is only effective when dosed by injection because it has no oral bioavailability. Herein we report the oral absorption of PTH in rats and monkeys facilitated by the novel delivery agent, N-[8-(2-hydroxy-4-methoxy)bensoyl]aminocaprylic acid (I). I was selected from a group of 100 delivery agents based on in vitro chromatog. studies and in vivo screening studies in rats. The PTH/I combination was then tested in monkeys. The interaction of I and PTH was evaluated by NMR spectroscopy. Monkeys were administered an aqueous solution containing I

and PTH and mean peak serum PTH concns. of about 3000 pg/mL were obtained. The relative bioavailability of oral PTH was 2.1% relative to s.c. administration. The biol. activity of the orally-delivered PTH was further evaluated in a rat model of osteoporosis. These studies showed that the bone formed following oral PTH/I administration was comparable to that formed following PTH injections. The I mediated absorption of PTH is hypothesized to be the result of a noncovalent interaction between I and PTH. The preliminary evaluation of this interaction by NMR is described. I facilitates the absorption of PTH following oral administration to both rats and monkeys. The orally-absorbed PTH is biol. active as demonstrated in a rat model of osteoporosis.

IT 257951-76-1

RL: PKT (Pharmacokinetics); BIOL (Biological study) (oral delivery of biol. active parathyroid hormone)

Ι

RN 257951-76-1 CAPLUS

CN Octanoic acid, 8-[(5-fluoro-2-hydroxybenzoyl)amino]- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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ANSWER 2 OF 2 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2000:117018 CAPLUS
                           132:151567
DOCUMENT NUMBER:
                           Preparation of arylamidoalkylcarboxylic acids
TITLE:
                           and compositions for delivering active agents.
                           Gschneidner, David; Leone-Bay, Andrea; Wang,
INVENTOR(S):
                           Eric; Errigo, Lynn; Kraft, Kelly; Moye-Sherman,
                           Destardi; Ho, Koc-Kan; Press, Jeffrey Bruce;
                           Wang, Nai Fang
                           Emisphere Technologies, Inc., USA
PATENT ASSIGNEE(S):
                           PCT Int. Appl., 53 pp.
SOURCE:
                           CODEN: PIXXD2
DOCUMENT TYPE:
                           Patent
                           English
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
                                             APPLICATION NO. DATE
     PATENT NO.
                       KIND DATE
                                              _____
                                              WO 1999-US17974 19990806
     WO 2000007979
                        A2
                              20000217
     WO 2000007979
                       A3 20000518
         W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR,
             CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM,
              AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
              CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                       AA 20000217
                                              CA 1999-2339765 19990806
     CA 2339765
                              20000228
                                              AU 1999-54711
                        A1
     AU 9954711
                        A2
                            20010530
                                             EP 1999-940967
                                                                 19990806
     EP 1102742
          R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC,
              PT, IE, SI, LT, LV, FI, RO
                                              BR 1999-12975
                                                                 19990806
     BR 9912975
                       Α
                              20010925
                                             TR 2001-20010036619990806
     TR 200100366
                         T2
                              20011121
                                              JP 2000-563614 19990806
     JP 2002522413
                        Т2
                              20020723
                                                                 19990806
                                             NZ 1999-509410
                         Α
                              20030829
     NZ 509410
                                                                 20010117
     ZA 2001000470
                              20010820
                                              ZA 2001-470
                        Α
                                                            P 19980807
                                           US 1998-95778P
PRIORITY APPLN. INFO.:
                                                             P 19980831
                                           US 1998-98500P
                                        US 1998-108366P P 19981113
                                           US 1999-119207P P 19990205
                                           WO 1999-US17974 W 19990806
     135 Title compds. are claimed. Thus, Me azeloyl chloride was added
AΒ
     dropwise to 2-amino-p-cresol in aqueous NaOH at 0° to give a
     residue which was stirred with aqueous NaOH in THF to give
     4-HO-5-MeC6H3NHCO(CH2)7CO2H. Title compds. at 100-300 mg/kg with
     parathyroid hormone at 25-200 \mu g orally or intracolonically in
     rats gave peak serum parathyroid hormone levels of 5-1459.71 pg/mL.
     257951-69-2P 257951-76-1P 257951-78-3P
IT
     RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL
      (Biological study); PREP (Preparation); USES (Uses)
         (preparation of arylamidoalkylcarboxylic acids and compns. for
         delivering active agents)
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Searcher :

Shears

RN 257951-69-2 CAPLUS

CN Octanoic acid, 8-[(3-chloro-5-fluoro-2-hydroxybenzoyl)amino]- (9CI) (CA INDEX NAME)

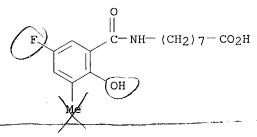
1 257951-76-1 CAPLUS

CN Octanoic acid, 8-[(5-fluoro-2-hydroxybenzoyl)amino]- (9CI) (CA INDEX NAME)

Elected

RN 257951-78-3 CAPLUS

CN Octanoic acid, 8-[(5-fluoro-2-hydroxy-3-methylbenzoyl)amino]- (9CI) (CA INDEX NAME)



FILE 'CAOLD' ENTERED AT 09:10:44 ON 07 JUN 2004

L5 0 S L3

FILE 'USPATFULL' ENTERED AT 09:10:48 ON 07 JUN 2004 4 S L3

L6 ANSWER 1 OF 4 USPATFULL on STN

ACCESSION NUMBER:

2002:126738 USPATFULL

TITLE:

L6

Disodium salts, monohydrates, and ethanol solvates for delivering active agents

INVENTOR(S):

Bay, William E., Ridgefield, CT, UNITED STATES

Agarwal, Rajesh K., Yorktown Heights, NY, UNITED

STATES

Chaudhary, Kiran, West Nyack, NY, UNITED STATES Majuru, Shingai, Brewster, NY, UNITED STATES Goldberg, Michael M., Englewood, NJ, UNITED

STATES

Russo, JoAnne P., Harrison, NY, UNITED STATES EMISPHERE TECHNOLOGIES, INC., Tarrytown, NY,

UNITED STATES (U.S. corporation)

PATENT ASSIGNEE(S):

NUMBER KIND DATE

US 2002065255 A1 20020530
US 2001-962794 A1 20010924

PATENT INFORMATION: APPLICATION INFO.: RELATED APPLN. INFO.:

US 2001-962794 Al 20010924 (9) Continuation of Ser. No. WO 2000-US9390, filed on

5 Apr 2000, UNKNOWN

DOCUMENT TYPE:

Utility APPLICATION

FILE SEGMENT: LEGAL REPRESENTATIVE:

DARBY & DARBY P.C., 805 Third Avenue, New York,

NY, 10022

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

28 1

LINE COUNT:

1642

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The inventors have discovered that the disodium salt of certain delivery agents has surprisingly greater efficacy for delivering active agents than the corresponding monosodium salt. Furthermore, the inventors have discovered that the disodium salts of these delivery agents form solvates with ethanol and hydrates with water. The delivery agents have the formula ##STR1##

wherein

R.sup.1, R.sup.2, R.sup.3, and R.sup.4 are indepedently hydrogen, halogen, C.sub.1-C.sub.4 alkyl, or C.sub.1-C.sub.4 alkoxy; and

R.sup.5 is a substituted or unsubstituted C.sub.2-C.sub.16 alkylene, substituted or unsubstituted C.sub.2-C.sub.16 alkenylene, substituted or unsubstituted C.sub.1-C.sub.12 alkyl(arylene), or substituted or unsubstituted aryl(C.sub.1-C.sub.12 alkylene). The hydrates and solvates of present invention also have surprisingly greater efficacy for delivering active agents, such as heparin and calcitonin, than their corresponding monosodium salts and free acids. The present invention provides an alcohol solvate, such as ethanol solvate, of a disodium salt of a delivery agent of the formula above. The invention also provides a hydrate of a disodium salt of a delivery agent of the formula above. Preferred delivery agents include, but are not limited to, N-(5-chlorosalicyloyl)-8-aminocaprylic acid

(5-CNAC), N-(10-[2-hydroxybenzoyl]amino)decanoic acid (SNAD), and sodium N-(8-[2-hydroxybenzoyl]amino)caprylate (SNAC). The invention also provides methods of preparing the disodium salt, ethanol solvate, and hydrate and compositions containing the disodium salt, ethanol solvate, and/or hydrate.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 2 OF 4 USPATFULL on STN

ACCESSION NUMBER:

2002:51629 USPATFULL

TITLE:

Progressive power lens and mold for producing

INVENTOR(S):

Shirayanagi, Moriyasu, Tokyo, JAPAN

PATENT ASSIGNEE(S):

Asahi Kogaku Kogyo Kabushiki Kaisha, Tokyo, JAPAN

(non-U.S. corporation)

KIND DATE NUMBER _____ ___ B1 20020312

PATENT INFORMATION: APPLICATION INFO.:

US 6356373 US 1998-98500 19980617 (9)

RELATED APPLN. INFO.:

Continuation of Ser. No. US 1995-517438, filed on 21 Aug 1995, now patented, Pat. No. US 5844657

> NUMBER DATE

PRIORITY INFORMATION:

JP 1994-197019 19940822

Utility DOCUMENT TYPE: FILE SEGMENT:

GRANTED

PRIMARY EXAMINER:

Sugarman, Scott J.

LEGAL REPRESENTATIVE:

Greenblum & Bernstein, P.L.C.

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

NUMBER OF DRAWINGS:

28 Drawing Figure(s); 14 Drawing Page(s)

LINE COUNT:

516

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

A progressive power lens has an effective surface including a progressive surface portion which progressively varies the power, and a peripheral rim surface portion which does not function as an effective surface and which is provided to surround the progressive surface portion. The rim surface portion is made of a curved surface. The invention is also directed to a mold which is used to produce a progressive power lens. The mold includes a progressive surface which progressively varies the power and a rim surface forming portion which forms a rim surface portion of the lens which does not function as a progressive surface. The rim surface forming portion is made of a curved surface.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 3 OF 4 USPATFULL on STN

ACCESSION NUMBER:

2002:22661 USPATFULL

TITLE: INVENTOR(S): Method of preparing alkylated salicylamides Gschneidner, David, Stamford, CT, UNITED STATES Bernadino, Joseph N., Stamford, CT, UNITED STATES

PATENT ASSIGNEE(S):

Bay, William E., Ridgefield, CT, UNITED STATES EMISPHERE TECHNOLOGIES, INC. (U.S. corporation)

Searcher : Shears 571-272-2528 Middle

B

KIND

DATE

| PATENT INFORMATION: | US 2002013497 A1 20020131 |
|-----------------------|---|
| | US 6399798 B2 20020604 |
| APPLICATION INFO.: | US 2001-922961 A1 20010803 (9) |
| RELATED APPLN. INFO.: | Continuation of Ser. No. WO 2000-US3189, filed on |
| | 4 Feb 2000, UNKNOWN |
| | |
| | NUMBER DATE |
| | |
| PRIORITY INFORMATION: | US 1999-119207P 19990205 (60) |
| | US 1999-127754P 19990405 (60) |
| | US 1999-173989P 19991230 (60) |
| DOCUMENT TYPE: | Utility |
| FILE SEGMENT: | APPLICATION |
| LEGAL REPRESENTATIVE: | DARBY & DARBY P.C., 805 Third Avenue, New York, |
| | NY, 10022 |
| NUMBER OF CLAIMS: | 20 |

NUMBER

The present invention relates to a method of preparing an alkylated salicylamide from a protected and activated salicylamide (hereinafter referred to as a "protected/activated salicylamide"). The method comprises the steps of (a) alkylating the protected/activated salicylamide with an alkylating agent to form a protected/activated alkylated salicylamide, and (b) deprotecting

and deactivated arkylated salitylamide, and (b) deprotecting and deactivating the protected/activated alkylated salicylamide, simultaneously or in any order, to form the alkylated salicylamide. The alkylated salicylamides prepared by this method are suitable for use in compositions for delivering active agents via oral or other routes of administration to animals.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

EXEMPLARY CLAIM: LINE COUNT:

| | L6 | ANSWER | 4 | of | 4 | USPATFULL | on | STN | |
|--|----|--------|---|----|---|-----------|----|-----|--|
|--|----|--------|---|----|---|-----------|----|-----|--|

ACCESSION NUMBER: 2001:40981 USPATFULL

913

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

TITLE: Master automotive sensor tester

INVENTOR(S): Johnson, Arthur D., Muskego, WI, United States
PATENT ASSIGNEE(S): Echlin, Inc., Branford, CT, United States (U.S.

corporation)

| | NUMBER | KIND | DATE | |
|---|--|--------|----------------------|-------|
| PATENT INFORMATION: APPLICATION INFO.: DOCUMENT TYPE: | US 6204770 US 1998-95778 Utility | B1 | 20010320 19980611 | (9) |
| FILE SEGMENT: PRIMARY EXAMINER: | Granted Wu, Daniel J. | | | |
| ASSISTANT EXAMINER: LEGAL REPRESENTATIVE: NUMBER OF CLAIMS: | La, Anh St. Onge Steward 12 | Johnst | on & Reens | LLC |
| EXEMPLARY CLAIM: NUMBER OF DRAWINGS: | 1 7 Drawing Figure | (s); 5 | Drawing Pa | ge(s) |

LINE COUNT: 587

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

A sensor tester for testing multiple vehicle sensors is provided comprising: a circuit for testing a vehicle piezoelectric knock. sensor; a circuit for testing a vehicle speed sensor; and a circuit for testing ignition coils. The circuit for testing piezoelectric knock sensors comprises: an integrated circuit electrically connectable to a power source, the integrated circuit having a multiple step voltage divider, a connector for connecting the integrated circuit to the knock sensor; and a plurality of light emitting diodes electrically connected to the voltage divider of the integrated circuit. The circuit for testing vehicle speed sensors comprises: a voltage divider for limiting the voltage of a power source to a reference voltage; a voltage comparator having a first input, a second input and an output, the first input electrically connected to the voltage divider, the second input electrically connected to the speed sensor; and a voltage transition detector for detecting a voltage transition from the output of the voltage comparator. The circuit for testing ignition coils that have a primary coil and a secondary coil comprises: capacitance means electrically connectable in a loop with a power source and the primary coil; a first voltage indicator electrically connected in series with a side of the secondary winding and electrically connectable to the power source; a second voltage indicator for detecting a voltage across the capacitance means; a current interrupter electrically connected in parallel with the capacitance means; a first connector for connecting the power source in series with the primary coil; and a second connector for connecting the power source in series with the secondary coil.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

(FILE 'MEDLINE, BIOSIS, EMBASE' ENTERED AT 09:11:15 ON 07 JUN 2004)
L7 0 S L3

(FILE 'MARPAT' ENTERED AT 09:11:38 ON 07 JUN 2004)

REP G1=(7-7) C NODE ATTRIBUTES: DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

L1

RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 13

STEREO ATTRIBUTES: NONE

ATTRIBUTES SPECIFIED AT SEARCH-TIME: ECLEVEL IS LIM ON ALL NODES ALL RING(S) ARE ISOLATED

3 SEA FILE=MARPAT SSS FUL L1 (MODIFIED ATTRIBUTES)

100.0% PROCESSED 8230 ITERATIONS

3 ANSWERS

SEARCH TIME: 00.00.30

L9 ANSWER 1 OF 3 MARPAT COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 135:257041 MARPAT

TITLE:

Preparation of alkylated salicylamides via a

dicarboxylate intermediate

INVENTOR(S):

Bernadino, Joseph N.; O'Toole, Doris C.; Bay,

William E.

PATENT ASSIGNEE(S):

Emisphere Technologies, Inc., USA

SOURCE:

PCT Int. Appl., 41 pp.

DOCUMENT TYPE:

CODEN: PIXXD2 Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| | PA. | rent : | NO. | | KII | 4D | DATE | | | | | | ON NO | | DATE | | |
|------|------|--------|-------|------|-----|-------|------|-------|------|------|-------|----------------|-------|-----|-------|------|-----|
| | WO | 2001 | 0702: | 19 | A. | 1 | 2001 | 0927 | | | | | | | 2001 | 0321 | |
| | | W: | ΑE, | AG, | AL, | AM, | AT, | AU, | ΑZ, | BA, | BB, | BG, | BR, | BY, | BZ, | CA, | CH, |
| | | | CN, | co, | CR, | CU, | CZ, | DE, | DK, | DM, | EE, | ES, | FI, | GB, | GD, | GE, | HR, |
| | | | HU, | ID, | IL, | IN, | IS, | JP, | KE, | KG, | KP, | KR, | KZ, | LC, | LK, | LR, | LS, |
| | | | LT, | LU, | LV, | MA, | MD, | MG, | MK, | MN, | MW, | MX, | ΜZ, | NO, | NΖ, | PL, | PT, |
| | | | RO, | RU, | SD, | SE, | SG, | SI, | SK, | SL, | ТJ, | TM, | TR, | TT, | TZ, | UA, | UG, |
| | | | US, | UZ, | VN, | YU, | ZA, | ZW, | AM, | ΑZ, | BY, | KG, | KΖ, | MD, | RU, | ТJ, | TM |
| | | RW: | GH, | GM, | KE, | LS, | MW, | MZ, | SD, | SL, | SZ, | TZ, | UG, | ZW, | AT, | BE, | CH, |
| | | | CY, | DE, | DK, | ES, | FI, | FR, | GB, | GR, | ΙE, | IT, | LU, | MC, | NL, | PT, | SE, |
| | | | TR, | BF, | ВJ, | CF, | CG, | CI, | CM, | GA, | GN, | GW, | ML, | MR, | NE, | SN, | TD, |
| | | | TG | | | | | | | | | | | | | | |
| | ΕP | 1284 | 724 | | A. | l | 2003 | 0226 | | E | P 20 | 01-9 | 5991 | 3 | 2001 | 0321 | |
| | | R: | ΑT, | BE, | CH, | DE, | DK, | ES, | FR, | GB, | GR, | IT, | LI, | LU, | NL, | SE, | MC, |
| | | | PT, | ΙE, | SI, | LT, | LV, | FI, | RO, | MK, | CY; | AL, | TR | | | | |
| | JΡ | 2003 | 52742 | 21 | T | 2 | 2003 | 0916 | | J: | P 20 | 01-5 | 6841 | 7 | 2001 |)321 | |
| | US | 2003 | 09699 | 92 | A. | l | 2003 | 0522 | | U: | S 200 | 02-2 | 3947 | 7 | 20020 |)920 | |
| PRIO | RIT | Y APP | LN. | INFO | . : | | | | | U | S 20 | 00-1 | 9128 | 4 P | 20000 | 0321 | |
| | | | | | | | | | | U: | S 20 | 00-1 | 9128 | 5 P | 20000 |)321 | |
| | | | | | | | | | | M | 200 | 01 - U: | S915 | 4 | 20010 |)321 | |
| OTHE | R SC | DURCE | (S): | | | CAS | REAC | r 13: | 5:25 | 7041 | | | | | | | |

GI

AΒ An alkylation process for preparing an alkylated salicylamide I (R1, R2, R3, R4 = H, halogen, optionally F or OH substituted C1-C4 alkoxy, COOH, OC(O)CH3, SO3H, CN; R7 = linear or branched, C1-C20 alkylene, alkenylene, or alkynylene; R7 is optionally substituted with C1-C4 alkyl, C1-C4 alkenyl, O, N, S, halogen, OH, C1-C4 alkoxy, aryl, heteroaryl, or vinyl; R7 is optionally interrupted with aryl, heteroaryl, vinyl, O, N, or S; R18, R19 = carboxyl or salt thereof, carboxylate, CN, halogen, ester, amine or salt thereof, alc., or thiol, or H, where at least one of R18 and R19 is not H) from a protected and activated salicylamide via a dicarboxylated salicylamide intermediate II (R1-R4 and R7 as defined above, and R5 = protecting group, R6 = activating group; R5R6 = atoms to complete a substituted or unsubstituted cyclic group; R8, R11 = C1-C4 alkyl or C1-C4 haloalkyl; R9, R10 = H, C1-C4 alkyl, or O). Thus, 2H-1, 3-benzoxazine-2, 4-(3H)-dione was alkylated with 2-(8-bromooctyl)malonic acid di-Et ester to give II (R1, R2, R3, R4 = H; R5R6 = CO; R7 = (CH2)6CH; R8, R11 = Et), which was hydrolyzed and decarboxylated to give I (R18 = COOH; R19 = H). The alkylated salicylamides prepared are useful in compns. for delivering active agents via oral or other routes of administration to animals. The present invention also relates to dicarboxylic salicylamide delivery agent compds. for the delivery of active agents. Methods of administration are provided as well.

IC ICM A61K031-195 ICS C07D265-12; C07C229-00; C07C233-00; C07C235-00; C07C237-00; C07C239-00

CC 25-19 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds) Section cross-reference(s): 63

ST carboxyalkylsalicylamide prepn; salicylamide carboxyalkyl prepn; benzoxazinedione N alkylation bromoalkylmalonate

IT Drug delivery systems

(carriers; preparation of alkylated salicylamides for use as delivery agent compds. for the delivery of active agents)

IT Carboxylic acids, preparation

RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (dicarboxylic; preparation of alkylated salicylamides by alkylation of protected and activated salicylamides, followed by hydrolysis and decarboxylation)

IT Alkylation

```
Decarboxylation
     Hydrolysis
        (preparation of alkylated salicylamides by alkylation of protected and
        activated salicylamides, followed by hydrolysis and
        decarboxylation)
ΙT
     Amides, preparation
     RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic
     preparation); PREP (Preparation); RACT (Reactant or reagent)
        (salicylamides; preparation of alkylated salicylamides by alkylation
        of protected and activated salicylamides, followed by hydrolysis
        and decarboxylation)
IT
     2037-95-8, Carsalam
                           6557-85-3
                                       77011-21-3
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (alkylation of benzoxazine with bromoalkylmalonate)
ΙT
     183990-46-7P
                    183990-65-0P
     RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic
     preparation); PREP (Preparation); RACT (Reactant or reagent)
        (preparation and sodium salt formation of)
IT
     183990-61-6P
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                                                  204852-67-5P
     257952-20-8P
                    264602-55-3P
     RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP
     (Preparation)
        (preparation for use as delivery agent compds. for the delivery of
        active agents)
REFERENCE COUNT:
                         1
                               THERE ARE 1 CITED REFERENCES AVAILABLE FOR
                               THIS RECORD. ALL CITATIONS AVAILABLE IN
                               THE RE FORMAT
     ANSWER 2 OF 3 MARPAT COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER:
                         133:163951 MARPAT
TITLE:
                         Preparation of N-(\omega-
                         carboxyalkyl) salicylamides
INVENTOR(S):
                         Gschneidner, David; Bernadino, Joseph N.; Bay,
                         William E.
PATENT ASSIGNEE(S):
                         Emisphere Technologies, Inc., USA
SOURCE:
                         PCT Int. Appl., 32 pp.
                         CODEN: PIXXD2
DOCUMENT TYPE:
                         Patent
LANGUAGE:
                         English
FAMILY ACC. NUM. COUNT:
                         4
PATENT INFORMATION:
     PATENT NO.
                     KIND DATE
                                          APPLICATION NO. DATE
                      ---- -----
    WO 2000046182
                     A1
                            20000810
                                          WO 2000-US3189
                                                            20000204
         W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR,
             CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, HR, HU, ID, IL,
             IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV,
             MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG,
             SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA,
             ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF,
             BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
```

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC,

EP 2000-911725 20000204

A1 20011031

EP 1149066

PT, IE, SI, LT, LV, FI, RO

A1 US 2002013497 20020131 US 2001-922961 20010803

US 6399798 20020604 B2 PRIORITY APPLN. INFO.:

US 1999-119207P 19990205 US 1999-127754P 19990405

US 1999-173989P 19991230

WO 2000-US3189 20000204

OTHER SOURCE(S): CASREACT 133:163951

GT

 R^4 0 NRR6 or5 R^2 R^{1} Ι

AΒ The title process utilizes protected/activated (sic) salicylamides I [R = H; R1-R4 = H, halo, alkyl, alkoxy, etc.; R5 = protecting group; R6 = activating group (sic); R5R6 = atoms to complete a ring]. Thus, salicylamide was converted to I (R1-R4 = H, R5R6 = C0)(II; R =H) which was N-alkylated by Br(CH2)6CN to give II [R = (CH2)6CN]. The latter was hydrolized in 2 steps to I [R = (CH2)6CO2H, R1-R6 =н].

IC ICM C07C229-14 ICS C07D265-26

CC 25-19 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)

ST carboxyalkylsalicylamide prepn; salicylamide carboxyalkyl prepn; benzoxazinedione N alkylation

IT Alkylation

(preparation of N-(ω -carboxyalkyl)salicylamides)

IT2037-95-8P, 2H-1,3-Benzoxazine-2,4(3H)-dione 4897-84-1P 24088-81-1P, 6-Chloro-2H-1,3-Benzoxazine-2,4(3H)-dione 287935-35-7P 287935-36-8P 287935-37-9P 287935-38-0P RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation of N-(ω -carboxyalkyl)salicylamides)

IT183990-46-7P 183990-61-6P 183990-65-0P 204852-67-5P

257952-20-8P

RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)

(preparation of $N-(\omega-carboxyalkyl)$ salicylamides)

ΤТ 2623-87-2, 4-Bromobutyric acid 7120-43-6, 5-Chlorosalicylamide 20965-27-9, 7-Bromoheptanenitrile 29823-21-0, Ethyl 8-bromooctanoate 55099-31-5, Ethyl 10-bromodecanoate

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of N-(ω-carboxyalkyl)salicylamides)

REFERENCE COUNT: THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

> Searcher : 571-272-2528 Shears

L9 ANSWER 3 OF 3 MARPAT COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

130:13925 MARPAT

TITLE:

Substituted 6- and 7-

aminotetrahydroisoquinolinecarboxylic acids as

matrix metalloproteinase inhibitors

INVENTOR(S):

Schudok, Manfred

PATENT ASSIGNEE(S):

Hoechst A.-G., Germany

SOURCE:

Ger. Offen., 18 pp. CODEN: GWXXBX

DOCUMENT TYPE:

Patent

LANGUAGE:

German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PA | TENT : | NO. | | KII | 4D | DATE | | | AI | PPLI | CATI | ON N | IO, | DATE | | + 3 |
|---------|--------|--------------|-------|------------|-------|------|------|-----|-----|-------------|---------------|------|-----|------|------|-----|
| DE | 1971 | 9817 | | A. | L | 1998 | 1119 | | DE | E 19 | 9 7 -1 | 9719 | 817 | 1997 | 0513 | |
| EP | 8784 | 67 | | A. | L | 1998 | 1118 | | E | 9 | 98-1 | 0803 | 39 | 1998 | 0502 | |
| EP | 8784 | 67 | | В. | L | 2001 | 1031 | | | | | | | | | |
| | R: | AT, | BE, | CH, | DE, | DK, | ES, | FR, | GB, | GR, | IT, | LI, | LU, | NL, | SE, | MC, |
| | | PT, | IE, | SI, | LT, | LV, | FI, | RO | · | · | · | | | | | · |
| AT | 2079 | 03 | | E | · | 2001 | 1115 | | ΑΊ | Ր 19 | 98-1 | 0803 | 39 | 1998 | 0502 | |
| ES | 2166 | 577 | | T3 | 3 | 2002 | 0416 | | ES | 3 19 | 98-1 | 0803 | 39 | 1998 | 0502 | |
| PT | 8784 | 67 | | Т | | 2002 | 0429 | | ΡΊ | Ր 19 | 98-1 | 0803 | 19 | 1998 | 0502 | |
| us | 5962 | <u>471</u> . | | Α | | 1999 | 1005 | | US | 5 19 | 98-7 | 5186 | 5 | 1998 | 0511 | |
| CA | 2237 | 382 | | A. | Ą | 1998 | 1113 | | CF | A 19 | 98-2 | 2373 | 82 | 1998 | 0512 | |
| CN | 1199 | 045 | | Α | | 1998 | 1118 | | CN | 1 19 | 98-1 | 0831 | .5 | 1998 | 0512 | |
| BR | 9803 | 694 | | Α | | 2000 | 0321 | | BF | R 19 | 98-3 | 694 | | 1998 | 0512 | |
| RU | 2212 | 405 | | C2 | 2 | 2003 | 0920 | | RU | J 19 | 98-1 | 0904 | 9 | 1998 | 0512 | |
| AU | 9865 | 938 | | A. | L | 1998 | 1119 | | Αl | J 19 | 98-6 | 5938 | } | 1998 | 0513 | |
| AU | 7310 | 79 | | B2 | 2 | 2001 | 0322 | | | | | | | | | |
| JP | 1031 | 6662 | | Αź | 2 | 1998 | 1202 | | JI | 2 19 | 98-1 | 3075 | 52 | 1998 | 0513 | 0 |
| PRIORIT | Y APP | LN. | INFO. | . : | | | | | DE | E 19 | 97-1 | 9719 | 817 | 1997 | 0513 | Đ |
| GI | | | | | | | | | | | | | | | | - |

$$R^{1}A$$
 X
 BSO_{2}
 N
 $NR^{3}R^{4}$
 I

Compd.
54
Ø
Found In
(1 Looked Go
Partent)

AB Title compds. I [R1 = (un)substituted Ph, heteroarom., OH, CO2H, alkyl, cycloalkylalkyl, CN, NO2, CF3; A = bond,O, CH:CH, C.tplbond.C; R2 = NHOH, (un)substituted OH; R3, R4 = H, alkyl,

Searcher :

Shears

```
aralkyl, acyl, (un) substituted CO2H, substituted sulfonyl,
     C(:NH)NH2; R3R4 = N heterocyclic; B = alkylene, oxaalkylene, CH:CH; X
     = CH:CH, O, S] were prepared for use as matrix metalloproteinase
     inhibitors. Thus, amide II was prepared from 1,2,3,4-
     tetrahydroisoquinolinecarboxylic acid by nitration, sulfonamide
     formation, isomer separation, reduction of the nitro group,
    N-tert-butoxycarbonylation, reaction with Me3SiONH2, and deblocking.
     II had IC50 against MMP-3 and MMP-8 of 1X10-8 and 2X10-9 M, resp.
IC
     ICM C07D217-26
     ICS C07D401-04; C07D405-14; C07D409-14; A61K031-47
    C07D521-00; C07D217-06; C07D333-06; C07D307-38
     27-17 (Heterocyclic Compounds (One Hetero Atom))
     Section cross-reference(s): 1, 7
ST
     aminotetrahydroisoquinolinecarboxylic acid prepn matrix
    metalloproteinase inhibitor
                                   191327-12-5P
                                                  215956-98-2P
     191327-09-0P
                    191327-11-4P
TΤ
                    215957-05-4P.
                                   215957-06-5P
                                                  215957-07-6P
     215957-04-3P
     RL: BAC (Biological activity or effector, except adverse); BSU
     (Biological study, unclassified); RCT (Reactant); SPN (Synthetic
     preparation); THU (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); RACT (Reactant or reagent); USES (Uses)
        (preparation of aminotetrahydroisoquinolinecarboxylic acids as matrix
        metalloproteinase inhibitors)
                                   215956-97-1P
                                                  215957-02-1P
IT
     191327-10-3P
                    191327-20-5P
                                                  215957-10-1P
     215957-03-2P
                    215957-08-7P
                                   215957-09-8P
     215957-11-2P
                    215957-12-3P
                                   215957-13-4P
                                                  215957-14-5P
     RL: BAC (Biological activity or effector, except adverse); BSU
     (Biological study, unclassified); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
        (preparation of aminotetrahydroisoquinolinecarboxylic acids as matrix
        metalloproteinase inhibitors)
IT
     9001-12-1, MMP-8
                       79955-99-0, MMP-3
     RL: BPR (Biological process); BSU (Biological study, unclassified);
     BIOL (Biological study); PROC (Process)
        (preparation of aminotetrahydroisoquinolinecarboxylic acids as matrix
        metalloproteinase inhibitors)
     215956-94-8P
IΤ
     RL: BYP (Byproduct); PREP (Preparation)
        (preparation of aminotetrahydroisoquinolinecarboxylic acids as matrix
        metalloproteinase inhibitors)
IT
     67123-97-1, 1,2,3,4-Tetrahydroisoquinoline-3-carboxylic acid
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (preparation of aminotetrahydroisoquinolinecarboxylic acids as matrix
        metalloproteinase inhibitors)
                    215956-89-1P
                                   215956-90-4P
                                                  215956-91-5P
IT
     215956-88-0P
     215956-93-7P
                    215956-95-9P
                                   215956-99-3P
                                                  215957-00-9P
     215957-15-6P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);
     RACT (Reactant or reagent)
        (preparation of aminotetrahydroisoquinolinecarboxylic acids as matrix
        metalloproteinase inhibitors)
IT
     215956-92-6P
                    215956-96-0P
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (preparation of aminotetrahydroisoquinolinecarboxylic acids as matrix
        metalloproteinase inhibitors)
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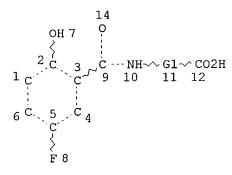
D

IT 215957-01-0P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of aminotetrahydroisoquinolinecarboxylic acids as matrix metalloproteinase inhibitors)

FILE 'MARPATPREV' ENTERED AT 09:12:50 ON 07 JUN 2004

L1 S





REP G1=(7-7) C NODE ATTRIBUTES: DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 13

STEREO ATTRIBUTES: NONE

ATTRIBUTES SPECIFIED AT SEARCH-TIME: ECLEVEL IS LIM ON ALL NODES ALL RING(S) ARE ISOLATED

L10

0 SEA FILE=MARPATPREV SSS FUL L1 (MODIFIED ATTRIBUTES)

100.0% PROCESSED

16 ITERATIONS

0 ANSWERS

SEARCH TIME: 00.00.01

(FILE 'CAPLUS, MEDLINE, BIOSIS, EMBASE, WPIDS, CONFSCI, SCISEARCH, JICST-EPLUS, JAPIO, USPATFULL' ENTERED AT 09:13:34 ON 07 JUN 2004) "GSCHNEIDNER D"?/AU L11 68 SEA ABB=ON PLU=ON ("LEONE BAY A"? OR "BAY LEONE A"? OR ALONE (& Structure) 2756 SEA ABB=ON PLU=ON L12 "BAY A"? OR "LEONE A"?)/AU L13 9400 SEA ABB=ON PLU=ON "WANG E"?/AU "ERRIGO L"?/AU L14 12 SEA ABB=ON PLU=ON "HO K"?/AU 8179 SEA ABB=ON PLU=ON L15 1111 SEA ABB=ON PLU=ON "PRESS J"?/AU L16 "TONG P"?/AU PLU=ON 1150 SEA ABB=ON L17 L11 AND L12 AND L13 AND L14 AND L15 L18 0 SEA ABB=ON PLU=ON AND L16 AND L17 PLU=ON L11 AND (L12 OR L13 OR L14 OR L15 OR L19 34 SEA ABB=ON L16 OR L17)

Searcher :

Shears

| L20 121 SEA ABB= L17) | ON PLU=ON L12 AND (L13 OR L14 OR L15 OR L16 OR | | | | | | | | |
|---|--|--|--|--|--|--|--|--|--|
| L21 15 SEA ABB= L22 2 SEA ABB= L23 15 SEA ABB= | | | | | | | | | |
| AGENT)) POLYPEPT | ON PLU=ON (L19 OR L20) AND (DELIVER? (5A) (ACTIVE (S) (PROTEIN OR POLYPROTEIN OR PEPTIDE OR CIDE OR HORMONE OR POLYSACCHARIDE OR MUCOPOLYSACCHARIDE OR MUC | | | | | | | | |
| L30 75 SEA ABB= | ON PLU=ON L21 OR L22 OR L23 OR L29 L30 (22 DUPLICATES REMOVED) | | | | | | | | |
| L31 ANSWER 1 OF 53 USPATFULL on STN ACCESSION NUMBER: 2004:89036 USPATFULL TITLE: Compounds and compositions for delivering active agents | | | | | | | | | |
| INVENTOR(S): | Leone-Bay, Andrea, Ridgefield, CT, UNITED STATES Paton, Duncan R., Purdys, NY, UNITED STATES Ho, Koc-Kan, Mt. Kisco, NY, UNITED STATES DeMorin, Frenel, Spring Valley, NY, UNITED STATES | | | | | | | | |
| | Emisphere Technologies, Inc. (U.S. corporation) | | | | | | | | |
| | NUMBER KIND DATE | | | | | | | | |
| APPLICATION INFO.: RELATED APPLN. INFO.: | US 2004068013 A1 20040408 US 2003-677906 A1 20031001 (10) Continuation of Ser. No. US 2002-90012, filed on 21 Feb 2002, GRANTED, Pat. No. US 6663887 Continuation of Ser. No. US 2000-730156, filed on 5 Dec 2000, ABANDONED Continuation of Ser. No. US 1999-346970, filed on 2 Jul 1999, ABANDONED Continuation of Ser. No. US 1997-795837, filed on 6 Feb 1997, GRANTED, Pat. No. US 6100298 Division of Ser. No. US 1994-335148, filed on 25 Oct 1994, GRANTED, Pat. No. US 5643957 Continuation-in-part of Ser. No. WO 1994-US4560, filed on 22 Apr 1994, PENDING Continuation-in-part of Ser. No. US 1993-51019, filed on 22 Apr 1993, GRANTED, Pat. No. US 5451410 Continuation-in-part of Ser. No. US 1994-205511, filed on 2 Mar 1994, GRANTED, Pat. No. US 5792451 Continuation-in-part of Ser. No. US 1994-231622, filed on 22 Apr 1994, GRANTED, Pat. No. US 5629020 | | | | | | | | |
| FILE SEGMENT: LEGAL REPRESENTATIVE: | Utility APPLICATION DARBY & DARBY P.C., 805 Third Avenue, New York, | | | | | | | | |
| NUMBER OF CLAIMS: EXEMPLARY CLAIM: LINE COUNT: | NY, 10022 27 1 956 | | | | | | | | |
| CAS INDEXING IS AVAILABED AB Modified amino ac | LE FOR THIS PATENT. cid compounds useful in the delivery of active | | | | | | | | |

agents are provided. Methods of administration and preparation are provided as well.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L31 ANSWER 2 OF 53 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on

STN

2003:161960 BIOSIS ACCESSION NUMBER:

DOCUMENT NUMBER:

PREV200300161960

TITLE:

Compounds and compositions for delivering active

agents.

AUTHOR(S):

Leone-Bay, Andrea [Inventor, Reprint Author]; Wang, Eric [Inventor]; Sarubbi, Donald J. [Inventor]; Leipold, Harry [Inventor]; Ho, Koc-Kan [Inventor]; Gschneidner, David

[Inventor]

CORPORATE SOURCE:

Monmouth Junction, NY, USA

ASSIGNEE: Emisphere Technologies, Inc.

PATENT INFORMATION: US 6525020 February 25, 2003

SOURCE:

Official Gazette of the United States Patent and Trademark Office Patents, (Feb 25 2003) Vol. 1267, No. 4. http://www.uspto.gov/web/menu/patdata.html.

e-file.

ISSN: 0098-1133 (ISSN print).

DOCUMENT TYPE:

Patent English

LANGUAGE: ENTRY DATE:

Entered STN: 26 Mar 2003

Last Updated on STN: 26 Mar 2003

Carrier compounds and compositions therewith which are useful in the AB delivery of active agents are provided. Methods of administration and preparation are provided as well.

L31 ANSWER 3 OF 53 USPATFULL on STN

ACCESSION NUMBER:

2003:334736 USPATFULL

TITLE:

Compounds and compositions for delivering active

agents

INVENTOR(S):

Leone-Bay, Andrea, Ridgefield, CT,

UNITED STATES

Wang, Eric, Yonkers, NY, UNITED STATES

Sarubbi, Donald J., Bronxville, NY, UNITED STATES

Leipold, Harry, Elmsford, NY, UNITED STATES

Gschneidner, David, Stamford, CT,

UNITED STATES

Ho, Koc-Kan, Monmouth Junction, NJ,

UNITED STATES

PATENT ASSIGNEE(S):

Emisphere Technologies, Inc. (U.S. corporation)

NUMBER KIND DATE _____ ___ 20031225

PATENT INFORMATION: APPLICATION INFO .:

US 2003235612 Α1 A1 US 2003-373582

20030224 (10)

RELATED APPLN. INFO.:

Continuation of Ser. No. US 2001-1731, filed on 31 Oct 2001, GRANTED, Pat. No. US 6525020

Division of Ser. No. US 1997-796336, filed on 7 Feb 1997, GRANTED, Pat. No. US 6358504

DOCUMENT TYPE: Utility

571-272-2528 Searcher : Shears

FILE SEGMENT:

APPLICATION

LEGAL REPRESENTATIVE:

DARBY & DARBY P.C., Post Office Box 5257, New

York, NY, 10150-5257

NUMBER OF CLAIMS:

EXEMPLARY CLAIM:

LINE COUNT:

1073

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB

Carrier compounds and compositions therewith which are useful in the delivery of active agents are provided. Methods of

administration and preparation are provided as well.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L31 ANSWER 4 OF 53 USPATFULL on STN

ACCESSION NUMBER: TITLE:

2003:307153 USPATFULL Compounds and compositions for delivering active

agents

INVENTOR(S):

Gschneidner, David, Stamford, CT,

UNITED STATES

Leone-Bay, Andrea, Ridgefield, CT,

UNITED STATES

Wang, Eric, Ellicott City, MD, UNITED

STATES

Freeman, John J., Fairfield, CT, UNITED STATES O'Toole, Doris C., Carmel, NY, UNITED STATES Shields, Lynn, Port Chester, NY, UNITED STATES

| | NUMBER | KIND | DATE | |
|------------------------|--------------|------|----------|------|
| | | | | |
| PATENT INFORMATION: US | 2003216589 | A1 | 20031120 | |
| US | 6693208 | В2 | 20040217 | |
| APPLICATION INFO.: US | 2002-168275 | A1 | 20020715 | (10) |
| WC | 2000-US34329 | | 20001218 | |

NUMBER DATE -**--**----

PRIORITY INFORMATION:

US 1999-60171213 19991216 Utility

DOCUMENT TYPE: FILE SEGMENT:

APPLICATION

LEGAL REPRESENTATIVE:

Darby & Darby, 805 Third Avenue, New York, NY,

10022

NUMBER OF CLAIMS:

29 1

EXEMPLARY CLAIM: LINE COUNT:

1195

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB

Amino acid derivative as carrier compounds and compositions which

are useful in the delivery of active

agents are provided. The active agents can be a

peptide, mucopolysaccharide,

carbohydrate, or lipid. Methods of

administration, including oral administration, and preparation are

provided as well.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L31 ANSWER 5 OF 53 USPATFULL on STN

Searcher :

Shears

ACCESSION NUMBER:

2003:113561 USPATFULL

TITLE:

Compounds and compositions for delivering active

agents

INVENTOR(S):

Leone-Bay, Andrea, Ridgefield, CT,

UNITED STATES

Ho, Koc-Kan, Monmouth Junction, NJ,

UNITED STATES

Sarubbi, Donald J., Carmel, NY, UNITED STATES Milstein, Sam J., Larchmont, NY, UNITED STATES Emisphere Technologies, Inc. (U.S. corporation)

PATENT ASSIGNEE(S):

NUMBER KIND DATE PATENT INFORMATION: US 2003078302 A1 20030424 US 6699467 B2 20040302

APPLICATION INFO.: RELATED APPLN. INFO.: US 2002-142009 A1 20020508 (10)

Continuation of Ser. No. US 1999-305506, filed on

5 May 1999, PENDING Continuation of Ser. No. US 1997-798031, filed on 6 Feb 1997, GRANTED, Pat. No. US 6001347 Continuation of Ser. No. WO

1996-US4580, filed on 1 Apr 1996, UNKNOWN Continuation-in-part of Ser. No. US 1995-414654,

filed on 31 Mar 1995, GRANTED, Pat. No. US

5650386

NUMBER DATE

PRIORITY INFORMATION:

US 1995-3111P 19950901 (60) US 1996-17902P 19960329 (60)

DOCUMENT TYPE:

Utility

FILE SEGMENT:

APPLICATION

LEGAL REPRESENTATIVE:

DARBY & DARBY, P.C., Post Office Box 5257, New

York, NY, 10150-5257

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

29 1

NUMBER OF DRAWINGS:

3 Drawing Page(s)

LINE COUNT:

1552

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Modified amino acid compounds useful in the delivery of

active agents are provided. The active agents

can be peptides. Methods of administration, such as

oral, subcutaneous, sublingual, and intranasal administration and methods of preparation of the modified amino acid compounds are

also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L31 ANSWER 6 OF 53 USPATFULL on STN

ACCESSION NUMBER:

2003:105829 USPATFULL

TITLE:

Pulmonary delivery of active agents

INVENTOR(S): Milstein, Sam J., Larchmont, NY, UNITED STATES Smart, John E., Katonah, NY, UNITED STATES Sarubbi, Donald J., Carmel, NY, UNITED STATES Leipold, Monica, Thornwood, NY, UNITED STATES

Flanders, Elizabeth, Ridgefield, CT, UNITED

STATES

O'Toole, Doris, Carmel, NY, UNITED STATES

Leone-Bay, Andrea, Ridgefield, CT,

UNITED STATES

Gschneidner, David, Stamford, CT,

UNITED STATES

PATENT ASSIGNEE(S): Emisphere Technologies, Inc. (U.S. corporation)

APPLICATION INTO: US 2002-1/2362 At 20020614 (10)

RELATED APPLN. INFO.: Continuation of Ser. No. US 2001-744777, filed on 26 Apr 2001, GRANTED, Pat. No. US 6440929 A 371 of International Ser. No. WO 1999-US16957, filed

on 27 Jul 1999, UNKNOWN

NUMBEŔ DATE

PRIORITY INFORMATION: US 1998-94267P 19980727 (60)

US 1998-104466P 19981016 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: DARBY & DARBY P.C., Post Office Box 5257, New

York, NY, 10150-5257

NUMBER OF CLAIMS: 17

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 9 Drawing Page(s)

LINE COUNT: 1171

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention provides methods for administering an active agent to an animal in need of the agent by the pulmonary route. This method comprises administering via the pulmonary route, a composition comprising (a) an active agent and (b)(i) an acylated amino acid, (ii) a sulfonated amino acid, or (iii) a combination of (i) and (ii). Administration of the compositions of the present invention provide improved pulmonary delivery and greater bioavailability of the active agent than administration of the active agent may be administered to obtain a desired result when contained in the composition of the present invention than when administered alone.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L31 ANSWER 7 OF 53 USPATFULL on STN

PATENT ASSIGNEE(S):

ACCESSION NUMBER: 2003:65455 USPATFULL

TITLE: Compounds and compositions for delivering active

agents

INVENTOR(S): Leone-Bay, Andrea, Ridgefield, CT,

UNITED STATES

Ho, Koc-Kan, Monmouth Junction, NJ,

UNITED STATES

Sarubbi, Donald J., Carmel, NY, UNITED STATES Milstein, Sam J., Larchmont, NY, UNITED STATES Emisphere Technologies, Inc. (U.S. corporation)

US 2003045579 A1 20030306

KIND

NUMBER

PATENT INFORMATION:

| APPLICATION INFO.: RELATED APPLN. INFO.: | US 6623731 B2 20030923 US 2001-38426 A1 20011019 (10) Continuation of Ser. No. US 2000-499958, filed on 8 Feb 2000, GRANTED, Pat. No. US 6346242 Continuation of Ser. No. US 1999-305506, filed on 5 May 1999, PENDING Continuation of Ser. No. US 1997-798031, filed on 6 Feb 1997, GRANTED, Pat. No. US 6001347 Continuation of Ser. No. WO 1996-US4580, filed on 1 Apr 1996, UNKNOWN Continuation-in-part of Ser. No. US 1995-414654, filed on 31 Mar 1995, GRANTED, Pat. No. US 5650386 |
|--|--|
| | NUMBER DATE |
| PRIORITY INFORMATION: | US 1995-3111P 19950901 (60) US 1996-17902P 19960329 (60) |
| DOCUMENT TYPE: | Utility |
| FILE SEGMENT: | APPLICATION |
| LEGAL REPRESENTATIVE: | DARBY & DARBY P.C., 805 Third Avenue, New York, NY, 10022 |
| NUMBER OF CLAIMS: | 29 |
| EXEMPLARY CLAIM: | 1 |
| NUMBER OF DRAWINGS: | 3 Drawing Page(s) |
| LINE COUNT: | 1582 |
| CAS INDEXING IS AVAILAB | |
| | cid compounds useful in the delivery of |
| | e provided. The active agents such as rhGH. Methods of |
| | such as oral, subcutaneous, sublingual, and |
| | istration, are provided, and methods of |
| | he modified amino acid compound are provided. |
| | |
| CAS INDEXING IS AVAILAE | SLE FOR THIS PATENT. |
| | PATFULL on STN |
| ACCESSION NUMBER: | 2003:11196 USPATFULL |
| TITLE: | Compounds and compositions for delivering active agents |
| INVENTOR(S): | Leone-Bay, Andrea, Ridgefield, CT, UNITED STATES |
| | Wang, Eric, Yonkers, NY, UNITED STATES |
| | Sarubbi, Donald J., Bronxville, NY, UNITED STATES |
| | Leipold, Harry, Elmsford, NY, UNITED STATES |
| | Ho, Koc-Kan, Monmouth Junction, NY, UNITED STATES |
| | Gschneidner, David, Stamford, CT, |
| | UNITED STATES |
| PATENT ASSIGNEE(S): | Emisphere Technologies, Inc. (U.S. corporation) |
| | NUMBER KIND DATE |
| | |
| | |

Searcher :

Shears 571-272-2528

PATENT INFORMATION:

US 2003008900

A1 20030109

US 6525020

B2 20030225

APPLICATION INFO.:

US 2001-1731

A1 20011031 (10)

RELATED APPLN. INFO.:

Division of Ser. No. US 1997-796336, filed on 7

Feb 1997, PENDING

DOCUMENT TYPE: FILE SEGMENT:

Utility APPLICATION

LEGAL REPRESENTATIVE:

DARBY & DARBY P.C., 805 Third Avenue, New York,

NY, 10022

NUMBER OF CLAIMS:

31 1

EXEMPLARY CLAIM: LINE COUNT:

1 2471

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB

Carrier compounds and compositions therewith which are useful in

the delivery of active agents are provided. Methods of administration and preparation are provided as well.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L31 ANSWER 9 OF 53

MEDLINE on STN

DUPLICATE 1

ACCESSION NUMBER:
DOCUMENT NUMBER:

2003086736

PubMed ID: 12599234

TITLE:

Chromosomal aberrations of primary lung

MEDLINE

adenocarcinomas in nonsmokers.

AUTHOR:

SOURCE:

Wong Maria P; Fung Lai-Fan; Wang Elaine;

Chow Wing-Shun; Chiu Shui-Wah; Lam Wah-Kit; Ho Kwok-Keung; Ma Edmond S K; Wan Thomas S K; Chung

Lap-Ping

CORPORATE SOURCE:

Department of Pathology, The University of Hong Kong,

Hong Kong, China.

Cancer, (2003 Mar 1) 97 (5) 1263-70.

Journal code: 0374236. ISSN: 0008-543X.

PUB. COUNTRY:

United States

DOCUMENT TYPE:

Journal; Article; (JOURNAL ARTICLE)

LANGUAGE:

English

FILE SEGMENT:

Abridged Index Medicus Journals; Priority Journals

ENTRY MONTH:

200305

ENTRY DATE:

Entered STN: 20030225

Last Updated on STN: 20030530

Entered Medline: 20030529

BACKGROUND: Lung carcinoma is a common malignancy, and tobacco AB carcinogenesis is the major cause. Studies on individual genes or loci have suggested, that in tumors from nonsmokers, different genetic alterations are present compared with tumors from smokers. It is possible that distinct genetic pathways may be involved. However, the targets remain largely unknown; and, to the authors' knowledge, molecular cytogenetics studies on lung carcinomas from nonsmokers have not been reported. METHODS: Comparative genomic hybridization (CGH) analysis was performed on primary lung adenocarcinoma samples from 32 patients who never smoked to identify loci of frequent aberrations. RESULTS: Different extents of aberration were found in 31 of the 32 samples studied. The most frequently altered locus was gain of 16p (59% of samples) followed by gain of 20q (44% of samples), with the minimal overlapping regions at 16p13.1-p13.2 and 20q13.2, respectively. Other over-represented loci with > 30% frequency were observed at 5p (34%

Searcher : Shears 571-272-2528

B

of samples), 7p (41% of samples), 8q (31% of samples), 17q (34% of samples), and 19q (34% of samples); and high-level DNA amplifications were detected at 1q, 7p, 12q, 19q, and 20q. DNA under-representation was observed less commonly and included 8p (28% of samples), 9p (22% of samples), 13q (28% of samples), and 18q (38% of samples). CONCLUSIONS: The current study identified targets of frequent genetic aberration in primary adenocarcinomas from nonsmokers. Compared with reported CGH findings in the literature, the current findings suggest that DNA gain at 16p is the distinct aberration involved in these tumors. Other frequently altered loci involve commonly reported oncogenic and tumor suppressor loci, suggesting an overlap with the genetic pathways of tobacco-induced lung carcinogenesis.

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L31 ANSWER 10 OF 53 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN

DUPLICATE 2

ACCESSION NUMBER: DOCUMENT NUMBER:

2002:240249 BIOSIS PREV200200240249

TITLE:

Compounds and compositions for delivering active

agents.

AUTHOR(S):

Leone-Bay, Andrea [Inventor]; Wang, Eric

[Inventor]; Sarubbi, Donald J. [Inventor, Reprint

author]; Leipold, Harry [Inventor]; Ho, Koc-Kan [Inventor]; Gschneidner, David

[Inventor]

CORPORATE SOURCE:

Bronxville, NY, USA

ASSIGNEE: Emisphere Technologies, Inc.

PATENT INFORMATION: US 6358504 March 19, 2002

SOURCE:

Official Gazette of the United States Patent and Trademark Office Patents, (Mar. 19, 2002) Vol. 1256, No. 3. http://www.uspto.gov/web/menu/patdata.html.

e-file.

CODEN: OGUPE7. ISSN: 0098-1133.

DOCUMENT TYPE:

Patent

LANGUAGE:

English

ENTRY DATE:

Entered STN: 10 Apr 2002

Last Updated on STN: 10 Apr 2002

AΒ Carrier compounds and compositions therewith which are useful in the delivery of active agents are provided. Methods of administration and preparation are provided as well.

L31 ANSWER 11 OF 53 USPATFULL on STN

ACCESSION NUMBER:

PATENT ASSIGNEE(S):

2002:221866 USPATFULL

TITLE:

Compounds and compositions for delivering active

agents

INVENTOR(S):

Leone-Bay, Andrea, Ridgefield, CT,

UNITED STATES

Paton, Duncan R., Purdys, NY, UNITED STATES

Ho, Koc-Kan, Mt. Kisco, NY, UNITED

STATES

DeMorin, Frenel, Spring Valley, NY, UNITED STATES Emisphere Technologies, Inc. (U.S. corporation)

NUMBER KIND

> Searcher : Shears 571-272-2528

____.

US 2002120009 PATENT INFORMATION: A1 20020829 B2 US 6663887 20031216 US 2002-90012 A1 20020221 (10) APPLICATION INFO .: RELATED APPLN. INFO.: Continuation of Ser. No. US 2000-730156, filed on 5 Dec 2000, ABANDONED Continuation of Ser. No. US 1999-346970, filed on 2 Jul 1999, ABANDONED Continuation of Ser. No. US 1997-795837, filed on 6 Feb 1997, GRANTED, Pat. No. US 6100298 Division of Ser. No. US 1994-335148, filed on 25 Oct 1994, GRANTED, Pat. No. US 5643957 Continuation-in-part of Ser. No. WO 1994-US4560, filed on 22 Apr 1994, UNKNOWN Continuation-in-part of Ser. No. US 1993-51019, filed on 22 Apr 1993, GRANTED, Pat. No. US 5451410 Continuation-in-part of Ser. No. US 1994-205511, filed on 2 Mar 1994, GRANTED, Pat. No. US 5792451 Continuation-in-part of Ser. No. US 1994-231622, filed on 22 Apr 1994, GRANTED, Pat. No. US 5629020 DOCUMENT TYPE: Utility APPLICATION FILE SEGMENT: DARBY & DARBY P.C., 805 Third Avenue, New York, LEGAL REPRESENTATIVE: NY, 10022 NUMBER OF CLAIMS: 27 EXEMPLARY CLAIM: LINE COUNT: 955 CAS INDEXING IS AVAILABLE FOR THIS PATENT. Modified amino acid compounds useful in the delivery of active agents are provided. Methods of administration and preparation are provided as well. CAS INDEXING IS AVAILABLE FOR THIS PATENT. L31 ANSWER 12 OF 53 USPATFULL on STN ACCESSION NUMBER: 2002:221768 USPATFULL TITLE: Compounds and compositions for delivering active agents Leone-Bay, Andrea, Ridgefield, CT, INVENTOR(S): UNITED STATES Wang, Eric, Yonkers, NY, UNITED STATES Sarubbi, Donald J., Bronxville, NY, UNITED STATES Leipold, Harry, Elmsford, NY, UNITED STATES Ho, Koc-Kan, Mt. Kisco, NY, UNITED STATES Gschneidner, David, Stamford, CT, UNITED STATES Barantsevich, Eugene N., Scarsdale, NY, UNITED STATES PATENT ASSIGNEE(S): Emisphere Technologies, Inc. (U.S. corporation) KIND DATE NUMBER ______ US 2002119910 A1 PATENT INFORMATION: 20020829 US 2002119910 A1 US 2000-746548 A1 20001219 (9) APPLICATION INFO.: Division of Ser. No. US 1997-796336, filed on 7 RELATED APPLN. INFO.:

Searcher : Shears 571-272-2528

Feb 1997, PENDING

Utility

DOCUMENT TYPE:

FILE SEGMENT:

APPLICATION

LEGAL REPRESENTATIVE:

DARBY & DARBY P.C., 805 Third Avenue, New York,

NY, 10022

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

31 1

1901

LINE COUNT:

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Carrier compounds and compositions therewith which are useful in the delivery of active agents are provided. Methods of

administration and preparation are provided as well.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L31 ANSWER 13 OF 53 USPATFULL on STN

2002:72921 USPATFULL

ACCESSION NUMBER: TITLE:

Compounds and compositions for delivering active

agents

INVENTOR(S):

Tang, Pingwah, Elmsford, NY, UNITED STATES

Leone-Bay, Andrea, Ridgefield, CT,

UNITED STATES

Gschneidner, David, Stamford, CT,

UNITED STATES

PATENT ASSIGNEE(S):

EMISPHERE TECHNOLOGIES, INC (U.S. corporation)

| | NUMBER | KIND | DATE |
|---------------------|----------------|------|----------|
| | | | |
| PATENT INFORMATION: | US 2002040061 | A1 | 20020404 |
| | US 6646162 | B2 | 20031111 |
| APPLICATION INFO.: | US 2001-939511 | Al | 20010824 |

RELATED APPLN. INFO.:

US 2001-939511 Al 20010824 (9) Continuation of Ser. No. WO 2000-US4830, filed on US 2001-939511

25 Feb 2000, UNKNOWN

| | NUMBER | DATE | |
|----|--------------|----------|------|
| | | | |
| US | 1999-121850P | 19990226 | (60) |

PRIORITY INFORMATION: DOCUMENT TYPE:

Utility

FILE SEGMENT:

APPLICATION

LEGAL REPRESENTATIVE:

DARBY & DARBY P.C., 805 Third Avenue, New York,

NY, 10022

NUMBER OF CLAIMS:

20

EXEMPLARY CLAIM:

1

LINE COUNT:

690

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB

Compounds and compositions for the delivery of active agents are provided. Methods of administration and preparation are provided

as well.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L31 ANSWER 14 OF 53 USPATFULL on STN

ACCESSION NUMBER:

2002:217236 USPATFULL

TITLE:

Pulmonary delivery of active agents

INVENTOR(S):

Milstein, Sam J., Larchmont, NY, United States Smart, John E., Katonah, NY, United States

Sarubbi, Donald J., Carmel, NY, United States Leipold, Monica, Thornwood, NY, United States

Flanders, Elizabeth, Ridgefield, CT, United

States

O'Toole, Doris, Carmel, NY, United States

Leone-Bay, Andrea, Ridgefield, CT,

United States

Gschneidner, David, Stamford, CT,

United States

Emisphere Technologies, Inc., Tarrytown, NY, PATENT ASSIGNEE(S):

United States (U.S. corporation)

| | NUMBER | KIND | DATE | |
|---------------------|-----------------|------|----------|--------------|
| | | | | |
| PATENT INFORMATION: | US 6440929 | B1 | 20020827 | |
| | WO 2000006184 | | 20000210 | |
| APPLICATION INFO .: | us 2001-744777 | | 20010426 | (9) |
| | WO 1999-US16957 | | 19990727 | 4. |
| | | | 20010426 | PCT 371 date |

| NUMBER | DATE |
|--------|------|
|--------|------|

PRIORITY INFORMATION:

US 1998-104466P 19981016 (60)

US 1998-94267P

19980727 (60)

DOCUMENT TYPE:

Utility GRANTED

FILE SEGMENT: PRIMARY EXAMINER:

Henley, III, Raymond

LEGAL REPRESENTATIVE:

Darby & Darby

NUMBER OF CLAIMS:

17

EXEMPLARY CLAIM:

NUMBER OF DRAWINGS:

13 Drawing Figure(s); 9 Drawing Page(s)

LINE COUNT:

1159

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB

The present invention relates to pulmonary delivery of active agents. Acylated or sufonated amino acids are used as carriers to facilitate pulmonary delivery of active agents to a target.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L31 ANSWER 15 OF 53 USPATFULL on STN

ACCESSION NUMBER:

2002:29118 USPATFULL

TITLE:

Compounds and compositions for delivering active

INVENTOR(S):

Leone-Bay, Andrea, Ridgefield, CT,

United States

Ho, Koc-Kan, Monmouth Junction, NJ,

United States

Sarubbi, Donald J., Carmel, NY, United States Milstein, Sam J., Larchmont, NY, United States Emishpere Technologies, Inc., Tarrytown, NY,

PATENT ASSIGNEE(S):

United States (U.S. corporation)

| | NUMBER | KIND | DATE | |
|---------------------|----------------|------|----------|-----|
| • | | | | |
| PATENT INFORMATION: | US 6346242 | В1 | 20020212 | |
| APPLICATION INFO.: | US 2000-499958 | | 20000208 | (9) |

APPLICATION INFO .: RELATED APPLN. INFO.:

Continuation of Ser. No. US 1999-305506, filed on

5 May 1999 Continuation of Ser. No. US

Searcher : Shears

1997-798031, filed on 6 Feb 1997, now patented, Pat. No. US 6001347 Continuation of Ser. No. WO 1996-US4580, filed on 1 Apr 1996 Continuation-in-part of Ser. No. US 1995-414654, filed on 31 Mar 1995, now patented, Pat. No. US

5650386

NUMBER DATE

PRIORITY INFORMATION:

US 1995-3111P 19950901 (60) US 1996-17902P 19960329 (60)

_____ ___

DOCUMENT TYPE:

Utility

FILE SEGMENT:

GRANTED

PRIMARY EXAMINER:

Russel, Jeffrey E.

LEGAL REPRESENTATIVE:

Darby & Darby

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

27

NUMBER OF DRAWINGS:

3 Drawing Figure(s); 3 Drawing Page(s)

LINE COUNT:

1466

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AΒ The present invention provides a compound having the formula

##STR1##

or a salt thereof which facilitates the delivery of active agents. Compositions and dosage unit forms comprising the compound of the present invention and at least one active agent, such as a peptide, mucopolysaccharide, carbohydrate, or a

lipid, are also provided. Methods of administration and preparation of the compounds and compositions of the invention are provided as well.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L31 ANSWER 16 OF 53 USPATFULL on STN

ACCESSION NUMBER:

2001:160972 USPATFULL

TITLE:

COMPOUNDS AND COMPOSITIONS FOR DELIVERING ACTIVE

AGENTS

INVENTOR(S):

LEONE-BAY, ANDREA, RIDGEFIELD, CT,

United States

HO, KOC-KAN, MONMOUTH JUNCTION, NJ,

United States

SARUBBI, DONALD J., CARMEL, NY, United States MILSTEIN, SAM J., LARCHMONT, NY, United States WANG, NAI FANG, LONG ISLAND CITY, NY, United

States

| | NUMBER | KIND | DATE | |
|-----------------------|-----------------|--------|-----------|------|
| | | | | |
| PATENT INFORMATION: | US 2001023240 | A1 | 20010920 | |
| | US 6428780 | B2 | 20020806 | |
| APPLICATION INFO.: | US 1999-305506 | A1 | 19990505 | (9) |
| RELATED APPLN. INFO.: | Continuation of | Ser No | IIS 1997- | 7980 |

Continuation of Ser. No. US 1997-798031, filed on 6 Feb 1997, GRANTED, Pat. No. US 6001347

Continuation of Ser. No. WO 1996-US4580, filed on 1 Apr 1996, UNKNOWN Continuation-in-part of Ser.

No. US 1995-414654, filed on 31 Mar 1995, GRANTED, Pat. No. US 5650386

| | GRANTED, Pat. No. | 05 5650386 | 0 | | | | | | | | |
|-------------------------|---------------------------------|-------------|------------|---------------|--|--|--|--|--|--|--|
| | NUMBER | | | | | | | | | | |
| PRIORITY INFORMATION: | US 1996-17902P US 1995-3111P | | | | | | | | | | |
| DOCUMENT TYPE: | Utility | | | | | | | | | | |
| FILE SEGMENT: | APPLICATION | | | | | | | | | | |
| LEGAL REPRESENTATIVE: | DARBY & DARBY PC, | 805 THIRD | AVENUE, N | IEW YORK, NY, | | | | | | | |
| | 10022 | | • | | | | | | | | |
| NUMBER OF CLAIMS: | 29 | | | | | | | | | | |
| EXEMPLARY CLAIM: | 1 | 1 | | | | | | | | | |
| NUMBER OF DRAWINGS: | <pre>3 Drawing Page(s)</pre> | | | | | | | | | | |
| LINE COUNT: | 1485 | | | | | | | | | | |
| CAS INDEXING IS AVAILAB | LE FOR THIS PATENT. | | | | | | | | | | |
| AB Modified amino ac | cid compounds usefu | l in the c | delivery o | of | | | | | | | |
| active agents are | e provided. The act | ive agents | 5 | | | | | | | | |
| can be peptides, | such as rhGH. Meth | ods of | | | | | | | | | |
| administration, s | such as oral, subcu | itaneous, s | sublingual | , and | | | | | | | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L31 ANSWER 17 OF 53 USPATFULL on STN

ACCESSION NUMBER: 2001:90856 USPATFULL

TITLE: Compounds and compositions for delivering active

intranasal administration, are provided, and methods of preparation of the modified amino acid compound are provided.

agents

INVENTOR(S): Leone-Bay, Andrea, Ridgefield, CT,

United States

Paton, Duncan R., Purdys, NY, United States

Ho, Koc-Kan, Mt. Kisco, NY, United

States

DeMorin, Frenel, Spring Valley, NY, United States Emisphere Technologies, Inc. (U.S. corporation)

PATENT ASSIGNEE(S):

| PATENT ASSIGNED (S). | Emisphere recimon | logies, | 1110. (0.5. | corporation |
|--|-------------------|--|---|---|
| | NUMBER | | | |
| PATENT INFORMATION: APPLICATION INFO.: RELATED APPLN. INFO.: | US 2000-730156 | A1 Ser. No. ING Conted on 6 No. US O, Pat. Part of 1994, UN Part of 1993, GF Lion-in- ed on 2 Ontinuat | 20001205 US 1999-3 inuation of Feb 1997, 1994-33514 No. US 564 Ser. No. W IKNOWN Ser. No. U RANTED, Pater of See Mar 1994, ion-in-par | 46970, filed on of Ser. No. US PENDING 8, filed on 25 3957 10 1994-US4560, 15 1993-51019, 16 No. US 17 No. US 18 GRANTED, Pat. 18 of Ser. No. |

Pat. No. US 5629020

DOCUMENT TYPE: Utility

FILE SEGMENT:

APPLICATION

LEGAL REPRESENTATIVE:

DARBY & DARBY P.C., 805 Third Avenue, New York,

NY, 10022

NUMBER OF CLAIMS:

27

EXEMPLARY CLAIM: LINE COUNT:

1 957

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Modified amino acid compounds useful in the delivery of active agents are provided. Methods of administration and preparation are

provided as well.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L31 ANSWER 18 OF 53 USPATFULL on STN

ACCESSION NUMBER:

2001:196986 USPATFULL

TITLE:

8-[(2-hydroxy-4-methoxy benzoyl) amino]-octanoic acid compositions for delivering active agents

INVENTOR(S):

Leone-Bay, Andrea, Ridgefield, CT,

United States

Wang, Eric, Yonkers, NY, United States Sarubbi, Donald J., Carmel, NY, United States Leipold, Harry, Elmsford, NY, United States Wang, Nai Fang, Long Island City, NY, United

States

PATENT ASSIGNEE(S):

Emisphere Technologies, Inc., Tarrytown, NY,

United States (U.S. corporation)

| | NUMBER | KIND | DATE | |
|--|------------------------------|------|----------------------|-----|
| PATENT INFORMATION: APPLICATION INFO.: | US 6313088 US 1997-797100 | B1 | 20011106 19970207 | (8) |
| DOCUMENT TYPE: | Utility | | | |
| FILE SEGMENT: | GRANTED | | | |
| PRIMARY EXAMINER: | Carr, Deborah D. | | | |
| LEGAL REPRESENTATIVE: | Darby & Darby | | | |
| NUMBER OF CLAIMS: | 22 | | | |
| EXEMPLARY CLAIM: | 1 | | | |

LINE COUNT:

1252

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB

Carrier compounds and compositions therewith which are useful in the delivery of active agents are provided. Methods of administration and preparation are provided as well.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L31 ANSWER 19 OF 53 USPATFULL on STN

ACCESSION NUMBER:

2001:82820 USPATFULL

TITLE:

Compounds and compositions for delivering active

INVENTOR(S):

Leone-Bay, Andrea, Ridgefield, CT,

United States

Wang, Eric Yanjun, Perry Hall, MD,

United States

Sarubbi, Donald J., Carmel, NY, United States Leipold, Harry, Elmsford, NY, United States Wang, Nai Fang, Long Island City, NY, United

Searcher :

Shears

States

PATENT ASSIGNEE(S):

Emisphere Technologies, Inc., Tarrytown, NY,

United States (U.S. corporation)

NUMBER KIND DATE _______

PATENT INFORMATION: APPLICATION INFO .:

US 6242495 US 2000-596016 B1 20010605 20000616 (9)

RELATED APPLN. INFO.:

Continuation of Ser. No. US 1997-797100, filed on

7 Feb 1997

DOCUMENT TYPE:

Utility Granted

FILE SEGMENT: PRIMARY EXAMINER:

Carr, Deborah D. Darby & Darby

LEGAL REPRESENTATIVE: NUMBER OF CLAIMS:

11 1

EXEMPLARY CLAIM: LINE COUNT:

1225

AΒ

Carrier compounds and compositions therewith which are useful in the delivery of active agents are provided. Methods of administration and preparation are provided as well.

L31 ANSWER 20 OF 53 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 3

ACCESSION NUMBER:

2000:117018 CAPLUS

DOCUMENT NUMBER:

132:151567

TITLE:

Preparation of arylamidoalkylcarboxylic acids and compositions for delivering active agents.

INVENTOR(S):

Gschneidner, David; Leone-Bay, Andrea; Wang, Eric; Errigo,

Lynn; Kraft, Kelly; Moye-Sherman, Destardi;

Ho, Koc-Kan; Press, Jeffrey

Bruce; Wang, Nai Fang

PATENT ASSIGNEE(S):

Emisphere Technologies, Inc., USA

SOURCE:

PCT Int. Appl., 53 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PAT | CENT I | NO. | O. KIND DATE APPLICATION NO. | | | | | | | | DATE | | | | | |
|---------------|--------|------|------------------------------|-------------|----------|------|------|-----|-----------------|-----------------|------|------|-----|----------|------|-----|
| WO 2000007979 | | | | | 20000217 | | | W | WO 1999-US17974 | | | | | 19990806 | | |
| WO | 2000 | 0079 | 79 | A3 20000518 | | | | | | | | | | | | |
| | W: | ΑE, | AL, | AM, | ΑT, | AU, | ΑZ, | BA, | BB, | BG, | BR, | BY, | CA, | CH, | CN, | CR, |
| | | CU, | CZ, | DE, | DK, | EE, | ES, | FI, | GB, | GD, | GE, | HR, | HU, | ID, | IL, | IN, |
| | | IS, | JP, | ΚE, | KG, | KΡ, | KR, | KΖ, | LC, | LK, | LR, | LS, | LT. | LU, | LV, | MD, |
| | | MG, | MK, | MN, | MW, | MX, | NO, | NΖ, | PL, | PT, | RO, | RU, | SD, | SE, | SG, | SI, |
| | | SK, | SL, | ТJ, | TM, | TR, | TT, | UA, | UG, | US, | UZ, | VN, | YU, | ZA, | ZW, | AM, |
| | | ΑZ, | BY, | KG, | ΚZ, | MD, | RU, | ТJ, | MT | | | | | | | |
| | RW: | GH, | GM, | ΚE, | LS, | MW, | SD, | SL, | SZ, | UG, | ZW, | ΑT, | BE, | CH, | CY, | DE, |
| | | DK, | ES, | FΙ, | FR, | GB, | GR, | ΙE, | IT, | LU, | MC, | ΝL, | PT, | SE, | BF, | ВJ, |
| | | CF, | CG, | CI, | CM, | GΑ, | GN, | GW, | ML, | MR, | NE, | SN, | TD, | TG | | |
| CA | 2339 | 765 | | A | A | 2000 | 0217 | | C. | CA 1999-2339765 | | | | 19990806 | | |
| ΑU | 9954 | 711 | | Α | 1 | 2000 | 0228 | | A | U 19 | 99-5 | 4711 | | 1999 | 0806 | |
| EΡ | 1102 | 742 | | Α | 2 | 2001 | 0530 | | E | P 19 | 99-9 | 4096 | 7 | 1999 | 0806 | |

Searcher : Shears

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R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC,
             PT, IE, SI, LT, LV, FI, RO
     BR 9912975
                            20010925
                                           BR 1999-12975
                                                            19990806
                      Α
     TR 200100366
                       Т2
                            20011121
                                           TR 2001-20010036619990806
                       T2
                                           JP 2000-563614 19990806
     JP 2002522413
                            20020723
                                                            19990806
                      A
                            20030829
                                          NZ 1999-509410
    NZ 509410
                                           ZA 2001-470
                                                            20010117
     ZA 2001000470
                      Α
                            20010820
                                                            1998/08/07
PRIORITY APPLN. INFO.:
                                        US 1998-95778P
                                                         Ρ
                                                            19980631
                                        US 1998-98500P
                                                         P
                                        US 1998-108366P P
                                                            19981113
                                        US 1999-119207P P
                                                            19990205
                                        WO 1999-US17974 W 19990806
AB
    135 Title compds. are claimed. Thus, Me azeloyl chloride was added
     dropwise to 2-amino-p-cresol in aqueous NaOH at 0° to give a
     residue which was stirred with aqueous NaOH in THF to give
     4-HO-5-MeC6H3NHCO(CH2)7CO2H. Title compds. at 100-300 mg/kg with.
    parathyroid hormone at 25-200 \mu g orally or intracolonically in
     rats gave peak serum parathyroid hormone levels of 5-1459.71 pg/mL.
L31 ANSWER 21 OF 53 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 4
                         2000:98355 CAPLUS
ACCESSION NUMBER:
DOCUMENT NUMBER:
                         132:141984
                         Pulmonary delivery of active agents
TITLE:
                         Milstein, Sam J.; Smart, John E.; Sarubbi,
INVENTOR(S):
                         Donald J.; Carozza, Monica; Flanders, Elizabeth;
                         O'Toole, Doris; Leone-Bay, Andrea;
                         Gschneidner, David
                         Emisphere Technologies, Inc., USA
PATENT ASSIGNEE(S):
                         PCT Int. Appl., 47 pp.
SOURCE:
                         CODEN: PIXXD2
DOCUMENT TYPE:
                         Patent
                         English
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
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| WO : | WO 2000006184 | | | A1 20000210 | | | | | WO 1999-US16957 19990727 | | | | | | | |
|------|---------------|------|-----|--------------|--------------------------------------|------|------|-----|--------------------------|-------|------|------|-----|------|------|-----|
| | W: | ΑE, | AL, | AM, | ΑT, | AU, | ΑZ, | BA, | BB, | BG, | BR, | BY, | CA, | CH, | CN, | CU, |
| | | CZ, | DE, | DK, | EE, | ES, | FI, | GB, | GD, | GE, | HR, | HU, | ID, | IL, | IN, | IS, |
| | | JP, | ΚE, | KG, | KP, | KR, | ΚZ, | LC, | LK, | LR, | LS, | LT, | LU, | LV, | MD, | MG, |
| | | MK, | MN, | MW, | MX, | NO, | ΝZ, | PL, | PT, | RO, | RU, | SD, | SE, | SG, | SI, | SK, |
| | | SL, | ТJ, | TM, | TR, | TT, | UA, | UG, | US, | UZ, | VN, | YU, | ZA, | ZW, | AM, | AZ, |
| | | BY, | KG, | KΖ, | MD, | RU, | ТJ, | TM | | | | | | | | |
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| | | CF, | CG, | CI, | CM, | GΑ, | GN, | GW, | ML, | MR, | ΝE, | SN, | TD, | ΤG | | |
| CA. | 2338 | 358 | | A | AA 20000210 CA 1999-2338358 19990727 | | | | | | | | | | | |
| CA. | 2338 | 419 | | \mathbf{A} | Α : | 2000 | 0210 | | C | A 19 | 99-2 | 3384 | 19 | 1999 | 0727 | |
| WO. | 2000 | 0065 | 34 | Α | 1 : | 2000 | 0210 | | M | 0 19: | 99-U | S170 | 90 | 1999 | 0727 | |
| | W: | ΑE, | AL, | AM, | AT, | AU, | ΑZ, | BA, | BB, | BG, | BR, | BY, | CA, | CH, | CN, | CU, |
| | | CZ, | DE, | DK, | EE, | ES, | FI, | GB, | GD, | GE, | HR, | HU, | ID, | IL, | IN, | IS, |
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| | | MK, | MN, | MW, | MX, | NO, | NΖ, | PL, | PT, | RO, | RU, | SD, | SE, | SG, | SI, | SK, |

APPLICATION NO. DATE

KIND DATE

BY, KG, KZ, MD, RU, TJ, TM

PATENT NO.

Searcher : Shears 571-272-2528

SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ,

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APPL

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RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE,
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                                            TR 2001-20010092219990727
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                                            US 2001-744862
                                                              20010419
     US 6440929
                             20020827
                                            US 2001-744777
                                                              20010426
                       В1
                             20030417
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     US 6693073
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                                            US 2003-600413
                                                              20030620
     US 2003225300
                       A1
                             20031204
                                         US 1998-94267P
                                                          Ρ
                                                              1998/07/27
PRIORITY APPLN. INFO .:
                                         US 1998-104466P
                                                          Ρ
                                                              19981016
                                         WO 1999-US16957
                                                          W
                                                              19990727
                                         WO 1999-US17090
                                                          W
                                                             19990727
                                         US 2001-744862
                                                          A1 20010419
                                         US 2001-744777
                                                          A1 20010426
                         MARPAT 132:141984
OTHER SOURCE(S):
     Methods of administration of active agents via the pulmonary route
     are provided. Thus, sodium 2-(4-(N-salicyloyl)aminophenyl)propionat
     e was prepared and 16 mg/kg this compound was mixed with 0.05 mg/kg
     porcine insulin and administered to rats by lung-spray-IT
     instillation. The AUC of the formulation wa higher than that
     without any carrier added.
                                THERE ARE 2 CITED REFERENCES AVAILABLE FOR
REFERENCE COUNT:
                          2
                                THIS RECORD, ALL CITATIONS AVAILABLE IN
                                THE RE FORMAT
L31 ANSWER 22 OF 53
                      CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 5
                         2000:492070 CAPLUS
ACCESSION NUMBER:
DOCUMENT NUMBER:
                          133:109955
TITLE:
                         Amino acid derivatives and compositions
                          therewith for delivering active agents
INVENTOR(S):
                          Leone-Bay, Andrea; Ho, Koc-kan
                          ; Sarubbi, Donald J.; Leipold, Harry R.
                          Emisphere Technologies, Inc., USA
PATENT ASSIGNEE(S):
SOURCE:
                          U.S., 44 pp., Cont.-in-part of PCT 9736480.
                          CODEN: USXXAM
DOCUMENT TYPE:
                          Patent
                          English
LANGUAGE:
FAMILY ACC. NUM. COUNT:
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PATENT INFORMATION:

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DATE
                                         APPLICATION NO.
                                                           DATE
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                                          ______
                                     US 1997-797816
                                                           19970207
                           20000718
    US 6090958
                      Α
                           19971009
                                        WO 1997-US5128
                                                           19970318
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            DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO,
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            GA, GN, ML, MR, NE, SN, TD, TG
                                          CA 1998-2319672 19980206
                     AA 19980813
    CA 2319672
                      AA 19980813
    CA 2319680
                                          CA 1998-2319680 19980206
                     A1 19980813
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            MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM,
            US, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES,
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                      A2
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                      A3
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           AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC,
            PT, IE, FI
                      A1 20000705
    EP 1015008
                                          EP 1998-905042
           AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC,
            PT, IE, FI
                                          EP 2000-122704
                           20010425
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                      A2
                           20030514
    EP 1093819
                      А3
           AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC,
            PT, IE, FI
                           20010515
                                          JP 2000-311231
                                                           19980206
    JP 2001131090
                      A2
                                          JP 2000-311230
                                                           19980206
    JP 2001139494
                      A2
                           20010522
                                                           19980206
                                          JP 1998-535034
    JP 2001513080
                      T2
                           20010828
                                          NZ 1998-337131
                                                           19980206
                           20010831
    NZ 337131
                      Α
                                          MX 1999-7290
                                                           19990806
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                                                           20001003
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                           20020201
                                          NZ 2000-507276
                                                           20001003
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                                          AU 2000-72261
                                                           20001214
                                          AU 2000-72260
                                                           20001214
    AU 771434
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                                       US 1996-17902P
                                                        P 19960329
PRIORITY APPLN. INFO.:
                                       WO 1997-US5128
                                                        A2 19970318
                                       US 1996-17902
                                                        A1 19960329
                                       US 1997-796334
                                                        A 19970207
                                       US 1997-796335
                                                        A 19970207
                                                        A 19970207
                                       US 1997-796336
                                                        A 19970207
                                       ÚS 1997-796337
                                       US 1997-796338
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A 19970207
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                A 19970207
US 1997-796341 A 19970207
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               A 19970207
US 1997-797813 A 19970207
US 1997-797816 A 19970207
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US 1997-797817
US 1997-797820 A 19970207
AU 1998-62756
                A3 19980206
CA 1998-2279331 A3 19980206
EP 1998-905042
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EP 1999-117292
                A3 19980206
JP 1998-535034
                A3 19980206
NZ 1998-337131
              - A1 19980206
WO 1998-US2619
                W 19980206
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Carrier compds., especially amino acid derivs., and compns. therewith AΒ which are useful in the delivery of active agents, e.g. peptides, mucopolysaccharides , carbohydrates, and lipids, are provided.

Methods of administration and preparation are provided as well. An intracolonic dosing composition containing parathyroid hormone 25 $\mu g/kg$, 4-[4-(phenoxyacetyl)aminophenyl]butyric acid as carrier 100 mg/kg in 25% aqueous propylene glycol was prepared

L31 ANSWER 23 OF 53 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on DUPLICATE 6

ACCESSION NUMBER: DOCUMENT NUMBER:

2001:78255 BIOSIS

PREV200100078255

TITLE:

Modified amino acids and compositions comprising the

Trademark Office Patents, (June 6, 2000) Vol. 1235,

same for delivering active agents.

AUTHOR(S):

Leone-Bay, Andre [Inventor]; Ho, Koc-Kan [Inventor, Reprint author]; Press, Jeffery Bruce [Inventor]; Wang, Nai-Fang [Inventor]

CORPORATE SOURCE:

Mt. Kisco, NY, USA

ASSIGNEE: Emisphere Technologies, Inc.

SOURCE:

PATENT INFORMATION: US 6071510 June 06, 2000 Official Gazette of the United States Patent and

No. 1. e-file.

CODEN: OGUPE7. ISSN: 0098-1133.

DOCUMENT TYPE:

Patent

LANGUAGE:

English

ENTRY DATE:

Entered STN: 7 Feb 2001

Last Updated on STN: 12 Feb 2002

- The present invention provides modified amino acids for delivering AΒ active agents, and particularly biologically or chemically active agents. The preferred modified amino acids of the present invention include N-acylated or sulfonated amino acids. These modified amino acids are used as carriers to facilitate the delivery of a cargo to a target. Such modified amino acids are well suited to form non-covalent mixtures with biologically-active agents for oral administration to animals. Methods for the preparation and administration of the modified amino acids and compositions including the same are also provided.
- L31 ANSWER 24 OF 53 CAPLUS COPYRIGHT 2004 ACS on STN

571-272-2528 Searcher : Shears

ACCESSION NUMBER:

2000:608713 CAPLUS

DOCUMENT NUMBER:

133:213157

TITLE:

Aromatic amides for delivering active agents....

INVENTOR(S):

Tang, Pingwah; Leone-Bay, Andrea;

Gschneidner, David

CODEN: PIXXD2

PATENT ASSIGNEE(S):

Emisphere Technologies, Inc., USA

SOURCE:

PCT Int. Appl., 28 pp.

DOCUMENT TYPE:

LANGUAGE:

Patent English

1

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| P | PATENT NO. | | | | | DATE | | APPLICATION NO. DATE | | | | | | | | |
|------------------------------------|------------|-------|------|------------------|-----|------|------|----------------------|-------------------------|-------|-------|------|----------|------|------|-----|
| W | 0 200 | 00503 | 86 | A | 1 | 2000 | 0831 | | | | | | | 2000 | 0225 | |
| | W: | ΑE, | AL, | AM, | AT, | ΑU, | ΑZ, | BA, | BB, | BG, | BR, | BY, | CA, | CH, | CN, | CR, |
| | | CU, | CZ, | DE, | DK, | DM, | EE, | ES, | FI, | GB, | GD, | GE, | HR, | HU, | ID, | IL, |
| | | IN, | IS, | JP, | ΚE, | KG, | ΚP, | KR, | KΖ, | LC, | LK, | LR, | LS, | LT, | LU, | LV, |
| | | MD, | MG, | MK, | MN, | MW, | MX, | NO, | NΖ, | PL, | PT, | RO, | RU, | SD, | SE, | SG, |
| | | SI, | SK, | SL, | ТJ, | TM, | TR, | TT, | TZ, | UA, | UG, | US, | UZ, | VN, | YU, | ZA, |
| | | ZW, | AM, | AZ, | BY, | KG, | ΚZ, | MD, | RU, | ТJ, | TM | | | | | |
| | RW | : GH, | GM, | ΚE, | LS, | MW, | SD, | SL, | SZ, | ΤZ, | UG, | ZW, | ΑT, | BE, | CH, | CY, |
| | | DE, | DK, | ES, | FI, | FR, | GB, | GR, | ΙE, | IT, | LU, | MC, | ΝL, | PT, | SE, | BF, |
| | | | | | • | | • | • | • | • | • | - | | TD, | | |
| E | P 116 | 3209 | | A | 1 . | 2001 | 1219 | | \mathbf{E} | P 200 | 00-93 | 1197 | 5 | 2000 | 0225 | |
| | R: | ΑT, | ΒE, | CH, | DE, | DK, | ES, | FR, | GB, | GR, | IT, | LI, | LU, | ΝL, | SE, | MC, |
| | | | | | | | FI, | | | | | | | | | |
| J | P 200 | 25373 | 72 | \mathbf{T}^{2} | 2 | 2002 | 1105 | JP 2000-600970 | | | | 0 | 20000225 | | | |
| U | S 200 | 20400 | 61 | A | 1 . | 2002 | 0404 | | US 2001-939511 20010824 | | | | 0824 | | | |
| U | S 664 | 6162 | | B: | 2 . | 2003 | 1111 | | | | | | | | | |
| PRIORI | TY AP | PLN. | INFO | .: | | | | Ī | JS 1 | 999-: | 1218 | 50P | P | 1999 | 0226 | |
| | | | | | | | | 1 | WO 2 | 7-000 | JS483 | 30 | W | 2000 | 0225 | |
| OTHER SOURCE(S): MARPAT 133:213157 | | | | | | | | | | | | | | | | |

GΙ

AΒ Amides such as I are used for the delivery of active agents such as growth hormones.

I was prepared from carsalam and 6-dimethylamino-1-hexanol, Ph3P, and diisopropyl azodicarboxylate in THF. Examples were given showing oral delivery of salmon calcitonin, low mol. wt heparin and human growth hormone with the addition of I.

I

REFERENCE COUNT:

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

Searcher :

2

Shears

L31 ANSWER 25 OF 53 USPATFULL on STN

ACCESSION NUMBER:

2000:102330 USPATFULL

TITLE:

Compounds and compositions for delivering active

INVENTOR(S):

Leone-Bay, Andrea, Ridgefield, CT,

United States

Paton, Duncan R., Purdys, NY, United States

Ho, Koc-Kan, Mt. Kisco, NY, United

DeMorin, Frenel, Spring Valley, NY, United States

PATENT ASSIGNEE(S):

Emisphere Technologies, Inc., Tarrytown, NY,

United States (U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION:

US 6100298 20000808 19970206 (8) US 1997-795837

APPLICATION INFO.: RELATED APPLN. INFO.:

Division of Ser. No. US 1994-335148, filed on 25

Oct 1994, now patented, Pat. No. US 5643957 which

is a continuation-in-part of Ser. No. WO 1994-US4560, filed on 22 Apr 1994 which is a continuation-in-part of Ser. No. US 1993-59019, filed on 22 Apr 1993, now patented, Pat. No. US 5451460 which is a continuation-in-part of Ser. No. US 1994-205511, filed on 2 Mar 1994, now patented, Pat. No. US 5792451 which is a

continuation-in-part of Ser. No. US 1994-231622, filed on 22 Apr 1994, now patented, Pat. No. US

5629020

DOCUMENT TYPE: FILE SEGMENT:

Utility Granted

PRIMARY EXAMINER:

Page, Thurman K.

ASSISTANT EXAMINER:

Benston, Jr., William E.

LEGAL REPRESENTATIVE:

Darby & Darby

NUMBER OF CLAIMS:

21

EXEMPLARY CLAIM:

1

LINE COUNT:

1141

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Modified amino acid compounds useful in the delivery of active agents are provided. Methods of administration and preparation are

provided as well.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L31 ANSWER 26 OF 53 USPATFULL on STN

ACCESSION NUMBER:

2000:57807 USPATFULL

TITLE:

Compounds and compositions for delivering active

agents

INVENTOR(S):

Leone-Bay, Andrea, Ridgefield, CT,

United States

Wang, Eric, Yonkers, NY, United States

Sarubbi, Donald J., Bronxville, NY, United States Leipold, Harry R., Elmsford, NY, United States

PATENT ASSIGNEE(S):

Emisphere Technologies, Inc., Tarrytown, NY,

United States (U.S. corporation)

571-272-2528 Searcher : Shears

DATE NUMBER KIND ______ US 6060513 20000509 19970207 (8) PATENT INFORMATION: US 1997-797817 APPLICATION INFO.: Utility DOCUMENT TYPE: Granted FILE SEGMENT: PRIMARY EXAMINER: Geist, Gary ASSISTANT EXAMINER: Davis, Brian J. LEGAL REPRESENTATIVE: Darby & Darby NUMBER OF CLAIMS: EXEMPLARY CLAIM: 1 1158 LINE COUNT: CAS INDEXING IS AVAILABLE FOR THIS PATENT. Carrier compounds and compositions therewith which are useful in AB the delivery of active agents are provided. Methods of administration and preparation are provided as well. CAS INDEXING IS AVAILABLE FOR THIS PATENT. L31 ANSWER 27 OF 53 USPATFULL on STN ACCESSION NUMBER: 2000:47218 USPATFULL Compounds and compositions for delivering active TITLE: agents Leone-Bay, Andrea, Ridgefield, CT, INVENTOR(S): United States Wang, Eric, Yonkers, NY, United States Sarubbi, Donald J., Bronxville, NY, United States Leipold, Harry, Elmsford, NY, United States Emisphere Technologies Inc., Hawthorne, NY, PATENT ASSIGNEE(S): United States (U.S. corporation) DATE NUMBER KIND ______ US 6051561 20000418 US 1997-797813 19970207 PATENT INFORMATION: 19970207 (8) APPLICATION INFO.: DOCUMENT TYPE: Utility FILE SEGMENT: Granted PRIMARY EXAMINER: Kight, John White, Everett ASSISTANT EXAMINER: Darby & Darby LEGAL REPRESENTATIVE: NUMBER OF CLAIMS: EXEMPLARY CLAIM: 1 LINE COUNT: 908 CAS INDEXING IS AVAILABLE FOR THIS PATENT. Carrier compounds and compositions therewith which are useful in the delivery of active agents are provided. Methods of

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L31 ANSWER 28 OF 53 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 7

administration and preparation are provided as well.

ACCESSION NUMBER:

1999:100747 CAPLUS

DOCUMENT NUMBER:

130:144204

TITLE:

Modified amino acids as carriers for enhanced

delivery of active agents

INVENTOR(S):

Leone-Bay, Andrea; Ho, Koc-kan

; Sarubbi, Donald J.; Milstein, Sam J.

PATENT ASSIGNEE(S): Emisphere Technologies, Inc., USA

SOURCE: U.S., 27 pp., Cont.-in-part of U.S. Ser. No.

414,654. CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English FAMILY ACC. NUM. COUNT: 30

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. DATE |
|-----------------------|-------|----------|----------------------------|
| US 5866536 | А | 19990202 | US 1997-798033 19970206 |
| US 5650386 | Α | 19970722 | US 1995-414654 19950331 |
| CN 1190893 | A | 19980819 | CN 1996-192998 19960401 |
| JP 2003313157 | A2 | 20031106 | JP 2003-140962 19960401 |
| US 6071510 | A | 20000606 | US 1997-839094 19970423 |
| AU 771024 | B2 | 20040311 | AU 2000-72261 20001214 |
| AU 771434 | В2 | 20040325 | AU 2000-72260 20001214 |
| PRIORITY APPLN. INFO. | : | | US 1995-414654 A2 19950331 |
| | | | US 1995-3111P P 19950901 |
| | , | | JP 1996-529751 A3 19960401 |
| | | | AU 1998-62756 A3 19980206 |

AB Carrier compds., compns., and dosage unit forms which are useful in the delivery of active agents are provided. The present invention provides compds. such as 10-salicyloylaminodecanoic acid (I) for

delivery of at least one active agent,
including peptides, mucopolysaccharides,

carbohydrates, or lipids. I prepared from

8-aminocaprylic acid and O-acetylsalicyloyl chloride was mixed with recombinant human growth hormone (rhGH) in a phosphate buffer solution The composition was orally administered to rats at I 200 mg/kg and rhGH 3 mg/kg and delivery was evaluated by an ELISA assay for rhGH; mean peak serum levels of rhGH was .apprx.60.92 ng/mL as compared to <0.1

ng/mL for control group received a composition without I.

REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE

IN THE RE FORMAT

L31 ANSWER 29 OF 53 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN DUPLICATE 8

ACCESSION NUMBER: 2000:292267 BIOSIS DOCUMENT NUMBER: PREV200000292267

TITLE: Compounds and compositions for delivering active

agents.

AUTHOR(S): Leone-Bay, Andre [Inventor]; Ho,

Koc-Kan [Inventor]; Sarubbi, Donald J.
[Inventor]; Milstein, Sam J. [Inventor]

CORPORATE SOURCE: ASSIGNEE: Emisphere Technologies, Inc., Tarrytown,

NY, USA

PATENT INFORMATION: US 6001347 December 14, 1999

SOURCE: Official Gazette of the United States Patent and

Trademark Office Patents, (Dec. 14, 1999) Vol. 1229,

No. 2. e-file.

CODEN: OGUPE7. ISSN: 0098-1133.

DOCUMENT TYPE: Patent

LANGUAGE:

English

ENTRY DATE:

Entered STN: 6 Jul 2000

Last Updated on STN: 7 Jan 2002

AΒ Carrier compounds, compositions, and dosage unit forms therefor which are useful in the delivery of active agents are provided. present invention provides a compound having the formula: ##STR1## or a salt thereof, wherein the compound may be used in a composition or dosage unit form for delivery of at least one

active agent, including a peptide,

mucopolysaccharide, carbohydrate, or a

lipid. Methods of administration and preparation of the compounds and compositions of the invention are provided as well, including oral administration. Further, the compositions of the invention may be prepared by mixing at least one active agent, at least one carrier compound, and, optionally, a dosing vehicle.

L31 ANSWER 30 OF 53 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on DUPLICATE 9

ACCESSION NUMBER: DOCUMENT NUMBER:

2000:290504 BIOSIS PREV200000290504

TITLE:

Compounds and compositions for delivering active

AUTHOR(S):

Leone-Bay, Andre [Inventor, Reprint

author]; Ho, Koc-Kan [Inventor]; Sarubbi,

Donald J. [Inventor]; Milstein, Sam J. [Inventor]

CORPORATE SOURCE:

Larchmont, NY, USA

ASSIGNEE: Emisphere Technologies, Inc., Tarrytown,

NY, USA

PATENT INFORMATION: US 5989539 November 23, 1999

SOURCE:

Official Gazette of the United States Patent and Trademark Office Patents, (Nov. 23, 1999) Vol. 1228,

No. 4. e-file.

CODEN: OGUPE7. ISSN: 0098-1133.

DOCUMENT TYPE:

Patent

LANGUAGE:

English

ENTRY DATE:

Entered STN: 6 Jul 2000

Last Updated on STN: 7 Jan 2002

Carrier compounds, compositions, and dosage unit forms therefor which are useful in the delivery of active agents are provided. present invention provides a compound having the formula: ##STR1## or a salt thereof, wherein the compound may be used in a composition or dosage unit form for delivery of at least one

active agent, including a peptide,

mucopolysaccharide, carbohydrate, or a

lipid. Methods of administration and preparation of the compounds and compositions of the invention are provided as well, including oral administration. Further, the compositions of the invention may be prepared by mixing at least one active agent, at least one carrier compound, and, optionally, a dosing vehicle.

L31 ANSWER 31 OF 53 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN

DUPLICATE 10

ACCESSION NUMBER: DOCUMENT NUMBER:

2000:291845 BIOSIS PREV200000291845

TITLE:

Compounds and compositions for delivering active

agents.

Searcher : 571-272-2528 Shears

AUTHOR(S): Leone-Bay, Andre [Inventor, Reprint

author]; Ho, Koc-Kan [Inventor]; Sarubbi,

Donald J. [Inventor]; Milstein, Sam J. [Inventor].

CORPORATE SOURCE: Larchmont, NY, USA

ASSIGNEE: Emisphere Technologies, Inc., Tarrytown,

NY, USA

PATENT INFORMATION: US 5965121 October 12, 1999

SOURCE:

Official Gazette of the United States Patent and

Trademark Office Patents, (Oct. 12, 1999) Vol. 1227,

No. 2. e-file.

CODEN: OGUPE7. ISSN: 0098-1133.

DOCUMENT TYPE:

LANGUAGE:

Patent English

ENTRY DATE: Entered

Entered STN: 6 Jul 2000

Last Updated on STN: 7 Jan 2002

AB Carrier compounds, compositions, and dosage unit forms therefor which are useful in the delivery of active agents are provided. The present invention provides a compound having the formula: ##STR1## or a salt thereof, wherein the compound may be used in a composition or dosage unit form for delivery of at least one

active agent, including a peptide,

mucopoly-saccharide, carbohydrate, of a lipid.

Methods of administration and preparation of the compounds and compositions of the invention are provided as well, including oral administration. Further, the compositions of the invention may be prepared by mixing at least one active agent, at least one carrier compound, and, optionally, a dosing vehicle.

L31 ANSWER 32 OF 53 USPATFULL on STN

ACCESSION NUMBER:

PATENT ASSIGNEE(S):

1999:151269 USPATFULL

TITLE:

Compounds and compositions for delivering active

agents

INVENTOR(S):

Leone-Bay, Andrea, Ridgefield, CT,

United States

Wang, Eric, Yonkers, NY, United States

Sarubbi, Donald J., Bronxville, NY, United States

Leipold, Harry, Elmsford, NY, United States Emisphere Technologies, Inc., Tarrytown, NY,

United States (U.S. corporation)

APPLICATION INFO.: US 1997-DOCUMENT TYPE: Utility

FILE SEGMENT: Granted PRIMARY EXAMINER: Page, Thurman K.

ASSISTANT EXAMINER: Channavajjala, Lakshmi

LEGAL REPRESENTATIVE:

Darby & Darby

NUMBER OF CLAIMS: 23 EXEMPLARY CLAIM: 1 LINE COUNT: 1650

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Carrier compounds and compositions therewith which are useful in the delivery of active agents are provided. Methods of administration and preparation are provided as well.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L31 ANSWER 33 OF 53 USPATFULL on STN

ACCESSION NUMBER:

1999:113788 USPATFULL

TITLE:

Compounds and compositions for delivering active

agents

INVENTOR(S):

Leone-Bay, Andrea, Ridgefield, CT,

United States

Paton, Duncan R., Purdys, NY, United States

Ho, Koc-Kan, Mt. Kisco, NY, United

DeMorin, Frenel, Spring Valley, NY, United States

PATENT ASSIGNEE(S): Emisphere Technologies, Inc., Hawthorne, NY,

United States (U.S. corporation)

NUMBER KIND DATE US 5955503 19990921

PATENT INFORMATION: APPLICATION INFO.:

US 1997-795833

19970206 (8)

RELATED APPLN. INFO.:

Division of Ser. No. US 1994-335148, filed on 25 Oct 1994, now patented, Pat. No. US 5643957 which

is a continuation-in-part of Ser. No. WO 1994-US4560, filed on 22 Apr 1994 which is a continuation-in-part of Ser. No. US 1993-51019, filed on 22 Apr 1993, now patented, Pat. No. US 5451410 And Ser. No. US 1994-205511, filed on 2 Mar 1994 And a continuation-in-part of Ser. No. US 1994-231622, filed on 22 Apr 1994, now

patented, Pat. No. US 5629020

Utility

DOCUMENT TYPE:

Granted

FILE SEGMENT: PRIMARY EXAMINER:

Page, Thurman K.

ASSISTANT EXAMINER:

Benston, Jr., William E.

LEGAL REPRESENTATIVE:

Darby & Darby

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

27 1

LINE COUNT:

1164

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Modified amino acid compounds useful in the delivery of active AB agents are provided. Methods of administration and preparation are

provided as well.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L31 ANSWER 34 OF 53 USPATFULL on STN

ACCESSION NUMBER:

PATENT ASSIGNEE(S):

1999:96332 USPATFULL

TITLE:

Compounds and compositions for delivering active

agents

INVENTOR(S):

Leone-Bay, Andrea, Ridgefield, CT,

United States

Wang, Eric, Yonkers, NY, United States

Sarubbi, Donald J., Bronxville, NY, United States

Leipold, Harry, Elmsford, NY, United States Emisphere Technologies, Inc., Tarrytown, NY,

United States (U.S. corporation)

NUMBER KIND DATE US 5939381 19990817 US 1997-796340 19970207 (8) PATENT INFORMATION: APPLICATION INFO.: DOCUMENT TYPE: Utility Granted FILE SEGMENT: Tsang, Cecilia J. PRIMARY EXAMINER: ASSISTANT EXAMINER: Gupta, Anish LEGAL REPRESENTATIVE: Darby & Darby NUMBER OF CLAIMS: 27 EXEMPLARY CLAIM: LINE COUNT: 1351 CAS INDEXING IS AVAILABLE FOR THIS PATENT. Carrier compounds and compositions therewith which are useful in the delivery of active agents are provided. Methods of administration and preparation are provided as well. CAS INDEXING IS AVAILABLE FOR THIS PATENT. L31 ANSWER 35 OF 53 USPATFULL on STN 1999:30370 USPATFULL ACCESSION NUMBER: Compounds and compositions for delivering active TITLE: INVENTOR(S): Leone-Bay, Andrea, Ridgefield, CT, United States Wang, Eric, Yonkers, NY, United States Sarubbi, Donald J., Bronxville, NY, United States Leipold, Harry, Elmsford, NY, United States Emisphere Technolgies Inc., Tarrytown, NY, United PATENT ASSIGNEE(S): States (U.S. corporation) NUMBER KIND DATE _____ PATENT INFORMATION: US 5879681 19990309 APPLICATION INFO.: US 1997-796334 19970207 (8) DOCUMENT TYPE: Utility FILE SEGMENT: Granted PRIMARY EXAMINER: Russel, Jeffrey E. LEGAL REPRESENTATIVE: Darby & Darby NUMBER OF CLAIMS: EXEMPLARY CLAIM: LINE COUNT: 1385 CAS INDEXING IS AVAILABLE FOR THIS PATENT. Carrier compounds, compositions, and dosage unit forms therefor which are useful in the delivery of active agents are provided. The present invention provides a compound having the formula: ##STR1## or a salt thereof, wherein the compound may be used in a composition or dosage unit form for delivery of at least one active agent, including a peptide, mucopoly-saccharide, carbohydrate, or a lipid. Methods of administration and preparation of the compounds and compositions of the invention are provided as well, including oral administration. Further, the compositions of the invention may be

Searcher : Shears 571-272-2528

prepared by mixing at least one active agent, at least one carrier

compound, and, optionally, a dosing vehicle.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L31 ANSWER 36 OF 53 USPATFULL on STN

ACCESSION NUMBER:

1999:27179 USPATFULL

TITLE:

Compounds and compositions for delivering active

INVENTOR(S):

Leone-Bay, Andrea, Ridgefield, CT,

United States

Wang, Eric, Yonkers, NY, United States

Sarubbi, Donald J., Bronxville, NY, United States

Leipold, Harry, Elmsford, NY, United States Emisphere Technologies Inc., Tarrytown, NY,

United States (U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION:

PATENT ASSIGNEE(S):

US 5876710 19990302 US 1997-796335 19970207 (8)

APPLICATION INFO.:

DOCUMENT TYPE:

Utility Granted

FILE SEGMENT:

PRIMARY EXAMINER: Russel, Jeffrey E.

LEGAL REPRESENTATIVE:

Darby & Darby

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

20

LINE COUNT:

1381

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Carrier compounds, compositions, and dosage unit forms therefor

which are useful in the delivery of active agents are provided. The present invention provides a

compound having the formula: ##STR1## or a salt thereof, wherein the compound may be used in a composition or dosage unit form for

delivery of at least one active agent,

including a peptide, mucopolysaccharide,

carbohydrate, or a lipid. Methods of

administration and preparation of the compounds and compositions

of the invention are provided as well, including oral

administration. Further, the compositions of the invention may be prepared by mixing at least one active agent, at least one carrier compound, and, optionally, a dosing vehicle.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L31 ANSWER 37 OF 53 USPATFULL on STN

ACCESSION NUMBER:

1999:12953 USPATFULL

TITLE:

Compounds and compositions for delivering active

agents

INVENTOR(S):

Leone-Bay, Andrea, Ridgefield, CT,

United States

Gschneidner, David, Stamford, CT,

United States

Wang, Eric, Yonkers, NY, United States

Sarubbi, Donald J., Bronxville, NY, United States

PATENT ASSIGNEE(S): Emisphere Technologies, Inc., Hawthorne, NY,

United States (U.S. corporation)

NUMBER DATE KIND US 5863944 19990126 US 1997-846254 19970430 (8) PATENT INFORMATION: APPLICATION INFO.: Utility DOCUMENT TYPE: Granted FILE SEGMENT: Geist, Gary PRIMARY EXAMINER: ASSISTANT EXAMINER: Davis, Brian J. LEGAL REPRESENTATIVE: Darby & Darby NUMBER OF CLAIMS: 31 EXEMPLARY CLAIM: LINE COUNT: 781 CAS INDEXING IS AVAILABLE FOR THIS PATENT. Carrier compounds and compositions therewith which are useful in the delivery of active agents are provided. Methods of administration and preparation are provided as well. CAS INDEXING IS AVAILABLE FOR THIS PATENT. L31 ANSWER 38 OF 53 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 11 1998:721669 CAPLUS ACCESSION NUMBER: 130:7397 DOCUMENT NUMBER: Compounds and compositions for delivering active TITLE: agents INVENTOR(S): Leone-Bay, Andrea; Gschneidner, David; Wang, Eric; Sarubbi, Donald J. Emisphere Technologies, Inc., USA PATENT ASSIGNEE(S): PCT Int. Appl., 27 pp. SOURCE: CODEN: PIXXD2 DOCUMENT TYPE: Patent LANGUAGE: English FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION: KIND DATE APPLICATION NO. DATE PATENT NO. ______ _____ WO 9849135 A1 19981105 WO 1998-US7045 19980408 W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG US 1997-846254 A 19990126 19970430 US 5863944

Searcher: Shears 571-272-2528

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC,

AU 1998-69590

JP 1998-547012

MX 1999-9632

EP 1998-915393 19980408

19980408

19980408

19991020

19981124

20001130

20011127

20000630

A1 20000216

A1

B2

Α

PT, IE, FI

JP 2001524109 T2

AU 9869590

AU 727068

EP 979225

MX 9909632

PRIORITY APPLN. INFO.: US 1997-846254 A 19970430 WO 1998-US7045 W 19980408 AΒ Carrier compds. and compns. which are useful in the delivery of active agents are provided, including N-2-(amino-5-fluorobenzoyl)-8aminocaprylic acid, 4-(N-(5-fluoro-2-aminobenzoyl)-4aminophenyl)butyric acid, and 8-(2-hydroxy-5chloroanilinocarbonyl)octanoic acid. Methods of administration and preparation are provided as well. REFERENCE COUNT: THERE ARE 2 CITED REFERENCES AVAILABLE FOR 2 THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT L31 ANSWER 39 OF 53 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 12 ACCESSION NUMBER: 1998:457247 CAPLUS DOCUMENT NUMBER: 129:113532 Compounds and compositions for delivering active TITLE: agents INVENTOR(S): Leone-Bay, Andrea; Wang, Eric ; Sarubbi, Donald J.; Leipold, Harry Emisphere Technologies, Inc., USA PATENT ASSIGNEE(S): SOURCE: U.S., 34 pp. CODEN: USXXAM Patent DOCUMENT TYPE: English LANGUAGE: FAMILY ACC. NUM. COUNT: 30 PATENT INFORMATION: סוג שואישית או

| PAT | CENT 1 | NO. | | KI | ND | DATE | | | A. | PPLI | CATI | N NC | ο. | DATE | | |
|-----|--------|------|-----|-----|-----|------|------|-----|--------------|-------|-------|-------|-----|------|------|------------------------|
| US | 5776 | 888 | | A | | 1998 | 0707 | | U | s 19 | 97-7: | 9633 | 8 | 1997 | 0207 | |
| CA | 2319 | 672 | - | A | | | | | | | | | | 1998 | | |
| CA | 2319 | 680 | | A | A | 1998 | 0813 | | C | A 19: | 98-2 | 3196 | 80 | 1998 | 0206 | |
| | 9834 | | | | | 1998 | 0813 | | W | 0 19: | 98-U | S261 | 9 | 1998 | 0206 | |
| | W: | AL, | AM, | AT, | ΑU, | ΑZ, | BA, | BB, | BG, | BR, | BY, | CA, | CH, | CN, | CU, | CZ, |
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| | | KP, | KR, | KZ, | LC, | LK, | LR, | LS, | LT, | LU, | LV, | MD, | MG, | MK, | MN, | MW, |
| | | MX, | NO, | NZ, | PL, | PT, | RO, | RU, | SD, | SE, | SG, | SI, | SK, | SL, | ТJ, | TM, |
| | | TR, | TT, | UA, | UG, | US, | US, | US, | US, | US, | US, | US, | US, | US, | US, | US, |
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| | | FI, | FR, | GB, | GR, | ΙE, | ΙΤ, | LU, | MC, | NL, | PT, | SE, | BF, | ВJ, | CF, | CG, |
| | | | | | | | MR, | | | | | | | | | |
| ΑU | 9862 | 756 | | A | 1 | 1998 | 0826 | | A | U 19 | 98-6 | 2756 | | 1998 | 0206 | |
| AU | 7387 | | | | | | | | | | | | | | | |
| | 9938 | | | | | | | | \mathbf{E} | P 19 | 99-1 | 1729: | 2 | 1998 | 0206 | |
| EP | 9938 | | | | | | | | | | | | | | | |
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| | R: | | | | | DK, | ES, | FR, | GB, | GR, | IT, | LI, | LU, | NL, | SE, | MC, |
| | | | IE, | | | | | | | | | | | | | |
| | 1093 | | | | | | | | E | P 20 | 00-1 | 2270 | 4 | 1998 | 0206 | |
| EP | 1093 | | | | | 2003 | | | | | | | | | | |
| | | | | | | DK, | ES, | FR, | GB, | GR, | IT, | LI, | LU, | NL, | SE, | MC, |
| | | • | IE, | | | | | | | | | | _ | | | |
| JP | 2001 | 1310 | 90 | A. | 2 | 2001 | 0515 | | J | P 20 | 00-3 | 1123 | 1 | 1998 | 0206 | |
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20010522
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     JP 2001139494
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                           20010831
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                                         NZ 1998-337131
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                                         MX 1999-7290
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PRIORITY APPLN. INFO.:
                                       US 1997-796334 A 19970207
                                       US 1997-796335 A 19970207
                                       US 1997-796336 A 19970207
                                       US 1997-796337 A 19970207
                                       US 1997-796338 A 19970207
                                       US 1997-796339 A 19970207
                                       US 1997-796340 A 19970207
                                       US 1997-796341 A 19970207
                                                      A 19970207
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                                       US 1997-797817
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                                                       A3 19980206
                                       AU 1998-62756
                                       CA 1998-2279331 A3 19980206
                                      EP 1998-905042
                                                       A3 19980206
                                      EP 1999-117292
                                                       A3 19980206
                                      JP 1998-535034
                                                       A3 19980206
                                       NZ 1998-337131
                                                       A1 19980206
                                       WO 1998-US2619
                                                       W 19980206
ΑB
    Carrier compds. and compns. which are useful in the delivery of
    active agents are provided. Methods of administration and preparation
    are provided as well. Standard methods of preparation are mentioned for the
     193 carrier compds. listed, which primarily are N-(fatty acid)
    benzamide derivs. Examples are listed for the delivery of
    parathyroid hormone, recombinant human growth hormone, interferon
    and the evaluation of heparin in rats.
REFERENCE COUNT:
                        13
                              THERE ARE 13 CITED REFERENCES AVAILABLE
                              FOR THIS RECORD. ALL CITATIONS AVAILABLE
                              IN THE RE FORMAT
L31 ANSWER 40 OF 53 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 13
                        1998:430107 CAPLUS
ACCESSION NUMBER:
DOCUMENT NUMBER:
                        129:113525
                        Compounds and compositions for delivering active
TITLE:
                        agents
INVENTOR(S):
                        Leone-Bay, Andrea; Wang, Eric
                        ; Sarubbi, Donald J.; Leipold, Harry
                        Emisphere Technologies, Inc., USA
PATENT ASSIGNEE(S):
                        U.S., 35 pp.
SOURCE:
                        CODEN: USXXAM
DOCUMENT TYPE:
                        Patent
LANGUAGE:
                        English
FAMILY ACC. NUM. COUNT:
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PATENT INFORMATION:
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                                         APPLICATION NO.
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US 5773647
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         RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES,
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             CI, CM, GA, GN, ML, MR, NE, SN, TD, TG
     AU 9862756
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PRIORITY APPLN. INFO.:
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                                                           19970207
                                        US 1997-796341
                                                         Α
                                                           19970207
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                                        US 1997-797813
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                                                         Α
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                                        CA 1998-2279331
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                                        NZ 1998-337131
                                                         Al 19980206
                                        WO 1998-US2619
                                                         W 19980206
AΒ
     Carrier compds. and compns. therewith which are useful in the
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delivery of active agents are provided. Methods of administration and preparation are provided as well. Standard methods of preparation are mentioned for the 193 carrier compds. listed, which primarily are N-(fatty acid) benzamide derivs. Examples are listed for the delivery of parathyroid hormone, recombinant human growth hormone, interferon and the evaluation of heparin in rats.

REFERENCE COUNT:

33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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ACCESSION NUMBER:
                                         WPIDS
CROSS REFERENCE:
                      1994-007461 [01]; 1994-341503 [42]; 1995-036072
                      [05]; 1995-178642 [23]; 1995-392779 [50];
                      1995-392800 [50]; 1996-200699 [20]; 1996-209175
                      [21]; 1996-230351 [23]; 1996-230352 [23];
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                      [22]; 2000-411184 [35]; 2001-440384 [47];
                      2002-153804 [20]; 2002-215073 [27]; 2003-090353
                      [80]
DOC. NO. CPI:
                      C1998-135554
                      Compositions for delivering e.g. peptide and lipid
TITLE:
                      - comprises e.g. caprylic acid or phenyl butyric
                      acid carrier, to increase the bio-availability of
                      the active agent.
DERWENT CLASS:
                      B05 P14
INVENTOR(S):
                      GSCHNEIDNER, D; HO, K; LEIPOLD, H R;
                      LEONE-BAY, A; MILSTEIN, S J; SARRUBI, D J;
                      WANG, E; GSCHNEIDER, D; HO, C; SARUBBI, D
                      J; BARANTSEVICH, E N; LEIPOLD, H; WANG, E Y
                      ; WANG, N F
                      (EMIS-N) EMISPHERE TECHNOLOGIES INC
PATENT ASSIGNEE(S):
COUNTRY COUNT:
                      82
PATENT INFORMATION:
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| | | GB | GΕ | GW | HU | ID | IL | IS | JP | KE | KG | ΚP | KR | ΚZ | LC | LΚ | LR | LS | LT | LU | LV |
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| | | TR | TT | UA | UG | US | UZ | VN | ΥU | zw | | | | | | | | | | | |
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| CA | 2319680 | A1 | 19980813 | (200065) EN |
| AU | 2000072260 | Α | 20010222 | (200115)# |
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| US | 6358504 | B1. | 20020319 | (200224) |
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| ΕP | 1015008 | A1 | | ΕP | 1998-905042 | 19980206 |
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| CA | 2319672 | A1 | Div ex | CA | 1998-2279331 | 19980206 |
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Searcher : S

Shears

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                                        19970207; US
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                      1997-797817
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                                        20001214; AU
                      2000-72261
                                        20001214; US
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                                        20011031; US
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                                        20030224; US
                      2003-395685
                                        20030324
ΑN
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                       WPIDS
CR
     1994-007461 [01]; 1994-341503 [42]; 1995-036072 [05]; 1995-178642
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     1998-387104 [33]; 1998-398084 [34]; 1998-398629 [34]; 1999-263626
     [22]; 2000-411184 [35]; 2001-440384 [47]; 2002-153804 [20];
     2002-215073 [27]; 2003-090353 [08]
AR
          9834632 A UPAB: 20040213
    A composition comprises: (a) at least one active agent; and (b) at
     least one carrier selected from caprylic acid derivatives of formula
    X-C(=0)-NH-(CH2)7-COOH (I), phenylbutyric acid derivatives of
     formula (II). X = 2-aminophenyl; 2-trifluoromethoxyphenyl; 2- or 3
     methoxyphenyl; 2-pyrazinyl; benzyloxy; phenoxy; 3-(2
    hydroxypyridinyl); 3-(8-chromone); 4-vinylphenyl; 3,5-dimethoxy-4
    hydroxyphenyl; 2-hydroxy-6-methoxyphenyl; 3-chloro-6 methoxyphenyl;
     2-methoxy-4-chlorophenyl; and Y = phenyloxymethyl;
    pentafluorophenyl; 3-methoxyphenyl; 2 hydroxyphenyl;
     2-(2,5-dimethoxycinnamoylethynyl); 2-pyrazinyl; 2
     (3-carboxypyrazinyl); benzyloxy; phenoxy; chromone; 3-(2
    hydroxypyridinyl); 2-, 3- or 4-iodophenyl; 2-(1-hydroxynaphthyl);
     2-methoxy-4-nitrophenyl; 3-nitro-4 methoxyphenyl;
     2-hydroxy-4-bromophenyl; 2-chloro-5-nitrophenyl;
     2,3,5-trichlorophenyl; 2-ethoxyphenyl; 2 dimethylaminophenyl;
     3-(2-chloropyridinyl).
          USE - The compositions can be used to deliver biologically or
     chemically active agents, e.g. across the blood/brain barrier.
     Dosage forms may be tablets, capsules or liquids.
          ADVANTAGE - The bioavailability of active agent is increased by
     administering the carrier compared to administration of active agent
     alone. The composition is particularly useful for active agents
     which would otherwise be destroyed or rendered less effective by
     conditions encountered before the active agent reaches its target
     zone.
     Dwg. 0/0
L31 ANSWER 42 OF 53 USPATFULL on STN
ACCESSION NUMBER:
                        1998:108514 USPATFULL
TITLE:
                        Compounds and compositions for delivering active
                        agents
                        Leone-Bay, Andrea, Ridgefield, CT,
INVENTOR(S):
                        United States
                          Wang, Eric, Yonkers, NY, United States
                        Sarubbi, Donald J., Bronxville, NY, United States
                        Leipold, Harry, Elmsford, NY, United States
```

PATENT ASSIGNEE(S):

Emisphere Technologies, Inc., Hawthorne, NY,

United States (U.S. corporation)

NUMBER KIND DATE ______ US 5804688 19980908 US 1997-796339 19970207 (8) PATENT INFORMATION: APPLICATION INFO.: Utility DOCUMENT TYPE: FILE SEGMENT: Granted PRIMARY EXAMINER: Geist, Gary ASSISTANT EXAMINER: Davis, Brian J. LEGAL REPRESENTATIVE: Darby & Darby NUMBER OF CLAIMS: EXEMPLARY CLAIM: 1 LINE COUNT: 1364

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Carrier compounds and compositions therewith which are useful in the delivery of active agents are provided. Methods of administration and preparation are provided as well.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L31 ANSWER 43 OF 53 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 14

ACCESSION NUMBER:

1997:527636 CAPLUS

DOCUMENT NUMBER:

127:152958

TITLE:

Modified amino acid carriers, their preparation, and compositions containing them for delivering

active agents

INVENTOR(S):

Leone-Bay, Andrea; Paton, Duncan R.;

Ho, Koc-Kan; DeMorin, Frenel

PATENT ASSIGNEE(S):

Emisphere Technologies, Inc., USA

SOURCE:

U.S., 22 pp., Cont.-in-part of U.S. Ser. No.

231,622.

CODEN: USXXAM

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 30

PATENT INFORMATION:

| PAT | CENT I | NO. | | KII | ND : | DATE | | | Al | PPLI | CATIO | ои ис | ٥. | DATE | | |
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PRIORITY APPLN. INFO.:
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OTHER SOURCE(S):
                         MARPAT 127:152958
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HO₂C (CH₂) 3 NHCO

GΙ

I

Modified amino acid compds. useful in the delivery of active agents (peptides, carbohydrates, antigens, monoclonal antibodies, hormones, pesticides, etc.) are provided. Methods of

administration and preparation are also provided. The effect of a composition

containing e.g. interferon- $\alpha 2$ and e.g. I (preparation given) on the serum interferon level was determined

L31 ANSWER 44 OF 53 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN DUPLICATE 15

ACCESSION NUMBER: 2002:80753 BIOSIS DOCUMENT NUMBER: PREV200200080753

TITLE: Compositions for oral delivery of active agents.

AUTHOR(S): Leone-Bay, A. [Inventor]; Ho, K-K.

HO

[Inventor]; Press, J. B. [Inventor] Ridgefield, Conn., USA CORPORATE SOURCE: ASSIGNEE: EMISPHERE TECHNOLOGIES, INC. PATENT INFORMATION: US 5650386 July 22, 1997 Official Gazette of the United States Patent and SOURCE: Trademark Office Patents, (July 22, 1997) Vol. 1200, No. 4, pp. 2859. print. CODEN: OGUPE7. ISSN: 0098-1133.

DOCUMENT TYPE:

Patent English

LANGUAGE: ENTRY DATE:

Entered STN: 16 Jan 2002

Last Updated on STN: 25 Feb 2002

L31 ANSWER 45 OF 53 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 16

ACCESSION NUMBER: DOCUMENT NUMBER:

1997:87 CAPLUS 126:31174

TITLE:

Preparation of modified amino acid compounds for

delivering active agents

INVENTOR(S):

Leone-Bay, Andrea; Ho, Koc-Kan; Sarubbi, Donald J.; Milstein, Sam J.;

Press, Jeffery Bruce

PATENT ASSIGNEE(S):

Emisphere Technologies, Inc., USA; Leone-Bay, Andrea; Ho, Koc-Kan; Sarubbi, Donald, J.;

Milstein, Sam, J.; Press, Jeffery, Bruce

SOURCE:

PCT Int. Appl., 86 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE:

FAMILY ACC. NUM. COUNT: 30

PATENT INFORMATION:

| | PATENT NO. KIND DATE APPLICATION NO. DATE | | | | | | | | | | | | | | | | |
|---|---|------|------|-----|-----|-----|------|------|-----|-----|------|------|-------|-----|------|------|-----|
| | WO | 9630 | | | | | | | | | | | | | | | |
| | | W: | AL, | AM, | ΑT, | ΑU, | ΑZ, | BB, | BG, | BR, | BY, | CA, | CH, | CN, | CZ, | DE, | DK, |
| | | | EE, | ES, | FI, | GB, | GΕ, | HU, | IS, | JP, | ΚE, | KG, | KΡ, | KR, | KZ, | LK, | LR, |
| | | | LS, | LT, | LU, | LV, | MD, | MG, | MK, | MN, | MW, | MX, | NO, | NΖ, | PL, | PT, | RO, |
| | | | | | SE, | | | | | | | | | | | | |
| | | RW: | KE, | LS, | MW, | SD, | SZ, | UG, | ΑT, | BE, | CH, | DE, | DK, | ES, | FI, | FR, | GB, |
| | | | GR, | ΙE, | IT, | LU, | MC, | ΝL, | PT, | SE, | BF, | ВJ, | CF, | CG, | CI, | CM, | GA |
| ŧ | US | 5650 | 386 | | Α | | 1997 | 0722 | | U | S 19 | 95-4 | 1465 | 4 | 1995 | 0331 | |
| | CA | 2214 | 323 | | Αź | Ą | 1996 | 1003 | | C | A 19 | 96-2 | 2143: | 23 | 1996 | 0401 | |
| | ΑU | 9656 | 629 | | A. | 1 | 1996 | 1016 | | Αl | Մ 19 | 96-5 | 6629 | | 1996 | 0401 | |
| | ΑU | 7122 | 22 | | | | | 1104 | | | | | | | | | |
| | ΕP | 8176 | 43 | | A | 1 | 1998 | 0114 | | E | P 19 | 96-9 | 1377 | 8 | 1996 | 0401 | |
| | | R: | AT, | BE, | CH, | DE, | DK, | ES, | FR, | GB, | GR, | IT, | LI, | LU, | NL, | SE, | MC, |
| | | | PT, | ΙE, | SI, | LT, | LV, | FI | | | | | | | | | |
| | ВR | 9604 | 880 | | Α | | 1998 | 0519 | | B: | R 19 | 96-4 | 880 | | 1996 | 0401 | |
| | JΡ | 2002 | 5064 | 18 | T: | 2 | 2002 | 0226 | | J | P 19 | 96-5 | 2975 | 1 | 1996 | 0401 | |
| | | 2203 | | | C | | | 0427 | | R | U 19 | 97-1 | 1822 | 4 | 1996 | 0401 | |
| | JР | 2003 | 3131 | 57 | А | 2 | 2003 | 1106 | | J | P 20 | 03-1 | 4096 | 2 | 1996 | 0401 | |
| Q | US | 5965 | 121 | | Α | | 1999 | 1012 | | U | s 19 | 97-7 | 9802 | 3 | 1997 | 0206 | |
| | | 5989 | | | A | | 1999 | 1123 | | U | s 19 | 97-7 | 9803 | 2 | 1997 | 0206 | |
| 9 | | 6001 | | | | | 1999 | 1214 | | U | s 19 | 97-7 | 9803 | 1 | 1997 | 0206 | |
| | FI | 9703 | 828 | | A | | 1997 | 0929 | | F | I 19 | 97-3 | 828 | | 1997 | 0929 | |
| | NO | 9704 | 495 | | Α | | 1997 | 1128 | | N | 0 19 | 97-4 | 495 | | 1997 | 0929 | |

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                                  20010920
         US 2001023240
                             A1
                                  20020806
          US 642878.0»
                             B2
                                  20020212
                                                  US 2000-499958 . . . . 20000208. . .
                             B1.
          US 6346242
                                  20040311
                                                  AU 2000-72261
                                                                    20001214
                             В2
          AU 771024
                                                  AU 2000-72260
                                                                    20001214
                                  20040325
          AU 771434
                             В2
                                                  US 2001-38426
                                                                    20011019
          US 2003045579
                             A1
                                  20030306
         US 6623731.
                                  20030923
                                                  US 2002-142009
                                                                    20020508
       9 US 2003078302
                             Α1
                                   20030424
        lo US 6699467
                                   20040302
                                                                 A2 19950331
     PRIORITY APPLN. INFO .:
                                               US 1995-414654
                                               US 1995-3111P
                                                                 P 19950901
                                               US 1996-17902P
                                                                    19960329
                                               JP 1996-529751
                                                                 A3 19960401
                                               WO 1996-US4580
                                                                 W 19960401
                                               US 1997-798031
                                                                 A1 19970206
                                               AU 1998-62756
                                                                 A3 19980206
                                               US 1999-305506
                                                                 A1 19990505
                                               US 2000-499958
                                                                 A1 20000208
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OTHER SOURCE(S):

MARPAT 126:31174

GΙ

$$HO_2C$$
 NH
 X
 I
 MO_2C
 NH
 X
 I
 I
 I

Modified amino acid compds. [I (n = 0-3; m = 0-4; X = H, halo, OH, etc.), II (n = 0-3; X = 2-F, 3-MeO, 4-Me, etc.), etc.], useful in the delivery of active agents such as, e.g., human growth hormone, interferon, heparin, calcitonin, parathyroid hormone, were prepared Thus, reaction of 8-aminocaprylic acid with 0-acetylsalicyloyl chloride in the presence of 2M aqueous NaOH afforded 57% III which was mixed with recombinant growth hormone (rhGH) in a phosphate buffer solution at pH

III

0

OH

7-8 and administered orally to rats at 25 mg/kg of carrier and at 1 mg/kg of rhGH. The mean peak serum level of compound III was 60.92 ng/mL as compared to < 10 ng/mL for control.

L31 ANSWER 46 OF 53 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 17

ACCESSION NUMBER:

1996:425385 CAPLUS

DOCUMENT NUMBER:

125:96071

TITLE:

Modified amino acids as absorption enhancers for

delivering active agents

INVENTOR(S):

Leone-Bay, Andrea; Paton, Duncan R.;

Ho, Kok-Kan; Demorin, Frenel

PATENT ASSIGNEE(S):

Emisphere Technologies, Inc., USA

SOURCE:

PCT Int. Appl., 57 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 30

PATENT INFORMATION:

| PAT | ENT I | 10. | | KI | ND | DATE | | | A | PPLI | CATI | ON NO | ο. | DATE | | |
|---------------|--------------|------|------|-----|-----|------------------------|------|-----|------|-------|------|-------|-----|------|------|-----|
| | 9612 | | | | | 1996 | | | | | | | | 1995 | 1016 | |
| | W: | AL, | AM, | ΑT, | ΑU, | BB, | BG, | BR, | BY, | CA, | CH, | CN, | CZ, | DE, | DK, | EE, |
| | | ES, | FI, | GB, | GΕ, | ΗU, | IS, | JΡ, | ΚE, | KG, | KP, | KR, | ΚZ, | LK, | LR, | LT, |
| | | LU, | LV, | MD, | MG, | MK, | MN, | MW, | MX, | NO, | ΝZ, | PL, | PT, | RO, | RU, | SD, |
| | | SE, | SG, | SI, | SK, | TJ | | | | | | | | | | |
| | RW: | KE, | MW, | SD, | SZ, | UG, | AT, | BE, | CH, | DE, | DK, | ES, | FR, | GB, | GR, | IE, |
| | | IT, | LU, | MC, | NL, | PT, | SE, | BF, | ВJ, | CF, | CG, | CI, | CM, | GA, | GN, | ML, |
| | | MR, | NE, | SN, | TD, | $\mathbf{T}\mathbf{G}$ | | | | | | | | | | |
| US | 5643 | 957 | | Α | | 1997 | 0701 | | U | S 19 | 94-3 | 3514 | В | 1994 | 1025 | |
| | 9539 | | | | | | | | A | U 19 | 95-3 | 9633 | | 1995 | 1016 | |
| AU | 7118 | 87 | | B. | 2 | 1999 | 1021 | | | | | | | | | |
| \mathbf{EP} | 7832 | 99 | | A | 1 | 1997 | 0716 | | E | P 19 | 95-9 | 3755 | 8 | 1995 | 1016 | |
| EΡ | 7832 | | | | | | | | | | | | | | | |
| | R: | ΑT, | BE, | CH, | DE, | DK, | ES, | FR, | GB, | GR, | ΙE, | IT, | LI, | LU, | MC, | NL, |
| | | PT, | | | | | | | | | | | | | | |
| | 9510 | | | Α | | 1997 | | | | | | | | 1995 | | |
| JP | 1050 | 7762 | | T | 2 | 1998 | 0728 | | | | | | | 1995 | | |
| AT | 2494 9701 | 22 | | E | | 2003 | 0915 | | A | T 19 | 95-9 | 3755 | 8 | 1995 | 1016 | |
| ИО | 9701 | 889 | | A | | 1997 | 0623 | | N | 10 19 | 97-1 | 889 | | 1997 | 0424 | |
| | 9701 | | | | | | | | | | | | | | | |
| AU | 7710 | 24 | | В | 2 | 2004 | 0311 | | Α | U 20 | 00-7 | 2261 | | 2000 | 1214 | |
| AU | 7714 | 34 | | В | 2 | 2004 | 0325 | | . A | 0 20 | 00-7 | 2260 | ~ | 2000 | 1214 | |
| ORITY | APP: | LN. | INFO | .: | | | | | US I | .994- | 3351 | 48 | A | 1994 | 1025 | |
| | | | | | | | | | | | | | | 1993 | | |
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the delivery of active agents. These compound are used as carriers to facilitate the delivery of a cargo to a target. Thus, 47.00 g acetylsalicyloyl chloride was added to a mixture of 50.00 g 4-(4-aminophenyl)butyric acid in 300 mL of 2M aqueous sodium hydroxide and the reaction was stirred at 25° for 2 h, then it was acidified with aqueous HCl to obtain a precipitate which was separated and washed

to give 31.89 g 4-(2-hydroxyphenylcarbonylamino)p-phenylbutanoic acid (I). I was mixed with interferon α -2 (II) in Tris-HCl buffer pH = 7-8 and was orally administered to rats at a rate of 300 mg I/kg and 1000 μ g II/kg. The mean peak serum level of II was 8213 as compared to 688 ng/mL for controls.

L31 ANSWER 47 OF 53 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 18

ACCESSION NUMBER:

1996:352623 CAPLUS

DOCUMENT NUMBER:

125:114150

TITLE:

A practical synthesis of ω-aminoalkanoic

acid derivatives from cycloalkanones

AUTHOR(S):

Ho, Koc-Kan; O'Toole, Doris C.; Achan, Douglas M.; Lim, Kitae T.; Press, Jeffery

B.; Leone-Bay, Andrea

CORPORATE SOURCE:

Emisphere Technol. Inc., Hawthorne, NY, 10532,

SOURCE:

Synthetic Communications (1996), 26(14),

2641-2649

CODEN: SYNCAV; ISSN: 0039-7911

PUBLISHER:

Dekker Journal English

DOCUMENT TYPE: LANGUAGE:

A practical synthetic route to N-Boc protected or Boc-amino acid coupled w-aminoalkanoic acids is reported and exemplified by the preparation of 8-(tert-butoxycarbonylamino)caprylic acid and (N-tert-butoxycarbonylphenylalanyl)-8-aminocaprylic acid. The sequence does not involve column chromatog., hydrogenation, azide or bromine related rearrangements, and therefore is amenable to scale-up. Homologs of the @-aminoalkanoic acid derivs. may also be prepared by using different cycloalkanones.

L31 ANSWER 48 OF 53 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

1996:220822 CAPLUS

TITLE:

Syntheses of 4-(4-salicyloylaminophenyl)butyric acid and 4-[4-(2-fluorocinnamylamino)phenyl]buty

ric acid

AUTHOR(S):

Ho, K. -K.; Wang, N. -F.; Vuocolo, E.

A.; Lercara, C.; O'Toole, D. C.; Achan, D. M.;

Press, J. B.; Leone-Bay, A.

CORPORATE SOURCE:

Emisphere Technologies Inc., Hawthorne, NY,

10532, USA

SOURCE:

Book of Abstracts, 211th ACS National Meeting, New Orleans, LA, March 24-28 (1996), ORGN-217. American Chemical Society: Washington, D. C.

CODEN: 62PIAJ

DOCUMENT TYPE:

Conference; Meeting Abstract

English LANGUAGE:

As part of our oral drug delivery program, hundred grams of pure compds. 2 and 3 were required. These compds. were prepared from acetanilide 1 via Friedal-Craft acylation, followed by Wolff-Kishner reduction, and condensation with the corresponding acyl halides. final coupling step in this sequence generated large amts. of the undesired oligomer 4 which was essentially impossible to sep. from the desired product on this scale. Herein we report conditions for suppression of this oligomeric material via a simultaneous, one-pot acid protection amine activation process.

L31 ANSWER 49 OF 53 SCISEARCH COPYRIGHT 2004 THOMSON ISI on STN

ACCESSION NUMBER: 96:2

96:280503 SCISEARCH

THE GENUINE ARTICLE: UA485

TITLE:

SYNTHESIS OF 4-(4-SALICYLOYLAMINOPHENYL) BUTYRIC ACID

AND 4-[4-(2-FLUOROCINNAMYLAMINO) PHENYL] BUTYRIC ACID

AUTHOR:

HO K K (Reprint); WANG N F; VUOCOLO E A; LERCARA C; OTOOLE D C; ACHAN D M; PRESS J B

; LEONEBAY A

CORPORATE SOURCE:

EMISPHERE TECHNOL INC, HAWTHORNE, NY, 10532

COUNTRY OF AUTHOR:

SOURCE:

TOP

ABSTRACTS OF PAPERS OF THE AMERICAN CHEMICAL SOCIETY (24 MAR 1996) Vol. 211, Part 2, pp. 217-ORGN.

ISSN: 0065-7727.

DOCUMENT TYPE:

Conference; Journal

LANGUAGE:

ENGLISH

REFERENCE COUNT:

No References

L31 ANSWER 50 OF 53 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on

STN

ACCESSION NUMBER:

1996:252714 BIOSIS

DOCUMENT NUMBER:

PREV199698808843

TITLE:

Syntheses of 4-(4-salicyloylaminophenyl) butyric acid and 4-(4-(2-fluorocinnamylamino) phenyl) butyric acid.

AUTHOR(S):

Ho, K.-K.; Wang, N.-F.; Vuocolo, E. A.; Lercara, C.; O'Toole, D. C.; Achan, D. M.;

Press, J. B.; Leona-Bay, A.

CORPORATE SOURCE:

Emisphere Technologies Inc., 15 Skyline Dr.,

Hawthorne, NY 10532, USA

SOURCE:

Abstracts of Papers American Chemical Society, (1996)

Vol. 211, No. 1-2, pp. ORGN 217.

Meeting Info.: 211th American Chemical Society

National Meeting. New Orleans, Louisiana, USA. March

24-28, 1996.

CODEN: ACSRAL. ISSN: 0065-7727.

DOCUMENT TYPE:

Conference; (Meeting)

Conference; Abstract; (Meeting Abstract)

LANGUAGE:

English

ENTRY DATE:

Entered STN: 31 May 1996

Last Updated on STN: 31 May 1996

L31 ANSWER 51 OF 53 JAPIO (C) 2004 JPO on STN

ACCESSION NUMBER:

2003-313157 JAPIO

TITLE:

COMPOUND AND COMPOSITION FOR DELIVERING ACTIVE

AGENT

INVENTOR:

LEONE-BAY ANDREA; HO KOC-KAN

; SARUBBI DONALD J; MILSTEIN SAM J; PRESS

JEFFERY BRUCE

PATENT ASSIGNEE(S):

EMISPHERE TECHNOLGIES INC

PATENT INFORMATION:

PATENT NO KIND DATE ERA MAIN IPC

JP 2003313157 A 20031106 Heisei C07C229-42

APPLICATION INFORMATION

C9/762067

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STN FORMAT:
                                    JP 2003-140962
                                                                        19960401
                                    JP2003140962
        ORIGINAL:
                                                                       Heisei
PRIORITY APPLN. INFO.: US 1995-414654 19950331
                                                                   19950901
PRIORITY APPLN. INFO.: US 1995-3111
                                     PATENT ABSTRACTS OF JAPAN (CD-ROM), Unexamined
SOURCE:
                                      Applications, Vol. 2003
        2003-313157
                              JAPIO
ΑN
        PROBLEM TO BE SOLVED: To provide a simple and readily prepared
AΒ
        system technique being not expensive and capable of delivering an
        active agent in a wide range.
        SOLUTION: A modified amino acid compound useful in the
        delivery of the active agent is
        provided. The active agent can be a peptide such as rhGH.
        Administration methods such as oral, subcutaneous, sublingual and
        intranasal administration, are provided. A method for preparation of
        the modified amino acid compound is also provided.
        COPYRIGHT: (C) 2004, JPO
L31 ANSWER 52 OF 53 JAPIO (C) 2004 JPO on STN
ACCESSION NUMBER:
                                     2001-139494 JAPIO
TITLE:
                                      COMPOSITION FOR DELIVERING COMPOUND AND
                                      ACTIVATOR
                                      LEONE-BAY ANDREA; HO KOC-KAN; LEIPOLD
INVENTOR:
                                      HARRY R; MILSTEIN SAM J; SARUBBI DONALD J;
                                      WANG ERIC; DAVID GUSHUNAIDAA
                                      EMISPHERE TECHNOLGIES INC
PATENT ASSIGNEE(S):
PATENT INFORMATION:
        PATENT NO KIND DATE ERA MAIN IPC
        JP 2001139494 A 20010522 Heisei A61K047-16
APPLICATION INFORMATION

STN FORMAT:

ORIGINAL:

US 1997-796336

PRIORITY APPLN. INFO.:

US 1997-796340

PRIORITY APPLN. INFO.:

US 1997-796338

19970207

PRIORITY APPLN. INFO.:

US 1997-797813

PRIORITY APPLN. INFO.:

US 1997-797813

PRIORITY APPLN. INFO.:

US 1997-797816

19970207

PRIORITY APPLN. INFO.:

US 1997-797816

19970207

PRIORITY APPLN. INFO.:

US 1997-797820

19970207

PRIORITY APPLN. INFO.:

US 1997-797100

19970207

PRIORITY APPLN. INFO.:

US 1997-796337

19970207

PRIORITY APPLN. INFO.:

US 1997-796334

19970207

PRIORITY APPLN. INFO.:

US 1997-796341

19970207

PRIORITY APPLN. INFO.:

US 1997-796339

19970207

PRIORITY APPLN. INFO.:

US 1997-796335

19970207

PRIORITY APPLN. INFO.:

PATENT ABSTRACTS OF JAPAN (CD-F
APPLICATION INFORMATION
                                    PATENT ABSTRACTS OF JAPAN (CD-ROM), Unexamined
SOURCE:
                                      Applications, Vol. 2001
AN
        2001-139494
                               JAPIO
        PROBLEM TO BE SOLVED: To provide a carrier compound and a
        composition thereof for delivering activators, the administrations
        including the oral route and the like, and the preparation method
        thereof.
        SOLUTION: The objective composition comprises (A) at least one of
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activator and (B) a compound represented by formula (1) or the salts thereof and the single dose unit including the composition. The activation agent includes at least peptide, muco-polysaccharide, carbohydrate or lipid. For example, it is selected from the group consisting of human growth hormone, bovine growth hormone, growth hormone-releasing hormone, interferons, interleukin-I, interleukin-II, insulin, heparin, low molecular-weight heparin, calcitonin, erythropoietin, atrial natriuretic polypeptide, antigens, monoclonal antibodies, somatostatin, somatostatin, adenocorticotropin, gonadotropin-releasing hormone, oxytocin, vasopressin, cromolyn sodium, vancomycin, deferoxamine, parathyroid hormone and their combinations.

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L31 ANSWER 53 OF 53 JAPIO (C) 2004 JPO on STN

ACCESSION NUMBER:

2001-131090 JAPIO

TITLE:

COMPOSITION FOR DELIVERING COMPOUND AND

ACTIVATOR

INVENTOR:

LEONE-BAY ANDREA; HO KOC-KAN; LEIPOLD HARRY R; MILSTEIN SAM J; SARUBBI DONALD J;

WANG ERIC; DAVID GUSHUNAIDAA

PATENT ASSIGNEE(S):

EMISPHERE TECHNOLGIES INC

PATENT INFORMATION:

| PATENT NO KI | ND DATE | ERA MA | IN IPC |
|-------------------------|----------------|--------------|----------------------|
| JP 2001131090 A | 20010515 | Heisei A6 | LK045-06 |
| APPLICATION INFORMATION | ſ | | |
| STN FORMAT: | JP 2000-31123 | l 199 | 30206 |
| ORIGINAL: | JP2000311231 | Hei | sei |
| PRIORITY APPLN. INFO.: | US 1997-79633 | 5 199702 | 207 |
| PRIORITY APPLN. INFO.: | US 1997-796340 | 19970 | 207 |
| PRIORITY APPLN. INFO.: | US 1997-796338 | 3 199702 | 207 |
| PRIORITY APPLN. INFO.: | US 1997-797813 | 3 199702 | 207 |
| PRIORITY APPLN. INFO.: | US 1997-797816 | 5 199702 | 207 |
| PRIORITY APPLN. INFO.: | US 1997-797820 | 199702 | 207 |
| PRIORITY APPLN. INFO.: | US 1997-797100 | 199702 | 207 |
| PRIORITY APPLN. INFO.: | US 1997-79633 | 7 199702 | 207 |
| PRIORITY APPLN. INFO.: | US 1997-79633 | 199702 | 207 |
| PRIORITY APPLN. INFO.: | US 1997-796343 | L 199702 | 207 |
| PRIORITY APPLN. INFO.: | US 1997-796339 | 199702 | 207 |
| PRIORITY APPLN. INFO.: | US 1997-79781 | 7 199702 | 207 |
| PRIORITY APPLN. INFO.: | US 1997-79633 | 5 199702 | 207 |
| SOURCE: | PATENT ABSTRAC | CTS OF JAPAN | (CD-ROM), Unexamined |
| | Applications, | Vol. 2001 | |

AN 2001-131090 JAPIO

AB PROBLEM TO BE SOLVED: To obtain a carrier compound and a composition effective for delivering an activator and to provide an administration method including an oral administration and a preparation method.

SOLUTION: This composition contains (A) at least one activator and (B) a compound of the formula or its salt. This administration unit form contains the composition.

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FILE 'HOME' ENTERED AT 09:35:50 ON 07 JUN 2004